

APPLIED SCIENCE READING ROOM

# THE *Country* GUIDE

CANADA'S NATIONAL FARM MONTHLY

HE GETS THE  
CALVES HE WANTS

933  
Turbulent Times for Applemen

COMEDY  
FOR TWO PLAYERS

(Fiction)

THREE DAY LOAN

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## High-Nitrogen Feeding Plan for Grain

Shortage of nitrogen is one of the most crucial fertility problems of prairie soils. Replacement of this key nutrient by manure and fertilizer still falls short of the amount being removed by crops.

However, the makers of Northwest fertilizers report increased use of high-nitrogen fertilizers by growers of wheat and other small grains.

Many farmers are now adopting

a balanced program for high-nitrogen feeding. Instead of drilling in nitrogen with seed, these farmers now broadcast high rates of nitrogen in the fall or spring. They then drill in phosphate fertilizer with the seed. This avoids any danger of harming seeds by contact with large amounts of nitrogen.

The impressive yields resulting from this are attributed to the fact

that ample nitrogen is provided both for crops and soil micro-organisms. These require nitrogen to break down residues, and if the supply is short they compete for it with the crop.

The varied range of Northwest high-nitrogen and phosphate fertilizers are available across the prairies from leading grain elevator companies.

## Letters

### Milking Practice

I do enjoy receiving The Guide. I haven't much to do these days, being retired, so I do enjoy reading and passing the reading matter on to others who are shut-ins.

Under your column "Odd and Interesting," you have a replica of a cow's udder, which was intended for use as a practice model for milking. Well, I surely smiled when I came to it, not for the oddity of it, but because it took me back to my days in the First World War, as a member of the Women's Land Army. I am nearly 70 now, but how well I remember our lessons on the "milker" for city-bred girls like myself who had to do some learning and fast.

Then came the day when we were sent to farms to do what we had learned. And yes, the "milker" had proved itself in our handling and milking of cows. I worked in Bedfordshire, Buckinghamshire and Essex, in England, from the earliest the Land Army was organized to 1919. I still stayed on farms to work until 1925, when I came to Canada. And still I puddle around my orchard pruning, etc., and tending my flowers and vegetable garden. Good luck to your Country Guide.

Mrs. J. D. Ramsey,  
R.R. No. 5,  
Perth, Ont.

### Need for Prayer

What is the most important thing at this time, when half or more of the world is in a dangerous state? There is far too much talk about war and bombs, and far too little about binding Satan. Here is what the Bible declares: "And I saw an angel come down from heaven . . . having a great chain in his hand. And he laid hold on the dragon, that old serpent, which is the Devil, and Satan, and bound him for a thousand years . . . that he should deceive the nations no more." (Revelation XX, 1-3).

The Devil is deceiving the nations. The only remedy is for thousands and millions of people, far and near, to plead with the Lord to have the Devil bound to deceive the nations no more.

Look at the terrible destruction of life and property in the last war. Even if the racket over Berlin doesn't get much better, the free people of the world must cry out against war. And I want to call on millions of Russians also to plead with the Lord. The world has everything it needs, and another war would be a great curse.

In Revelation XII, 12, we read: "Woe to the inhabitants of the earth and of the sea! for the devil is come down unto you, having great wrath, because he knoweth that he hath but a short time." It looks as if since the First World War the Devil is doing his best to keep the world in a state of dangerous torment. So this is why I think the most upright Christian people of the world should plead with the Lord for 7 years to have Satan bound.

Moses Culbertson,  
Handel, Sask.

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CONTENT



# NORTHWEST FERTILIZER

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# THE Country GUIDE

Incorporating *The Nor'West Farmer* and *Farm and Home*

## CANADA'S NATIONAL FARM MONTHLY

Editor: LORNE HURD

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GWEN LESLIE

## In This Issue

**SLATTED FLOORING** has provoked much interest among hog raisers in recent months. This month two Ontario farmers describe their own set-up and tell how it has worked for them, on page 17.

**HOMEMAKERS** hear much about design these days. What is design? And what are the principles of good design? Helen Bentley applies these principles to place mat settings for you on page 63.

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**COVER:** A southern Ontario flock owner weighing birds for market.  
—Don Smith photo.

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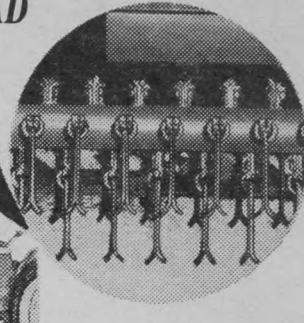
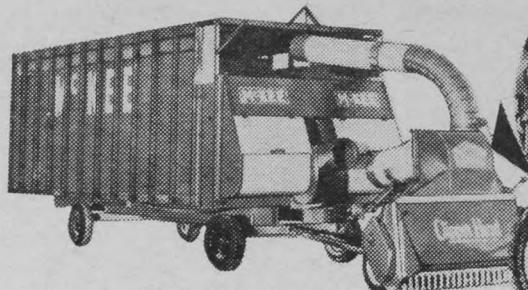
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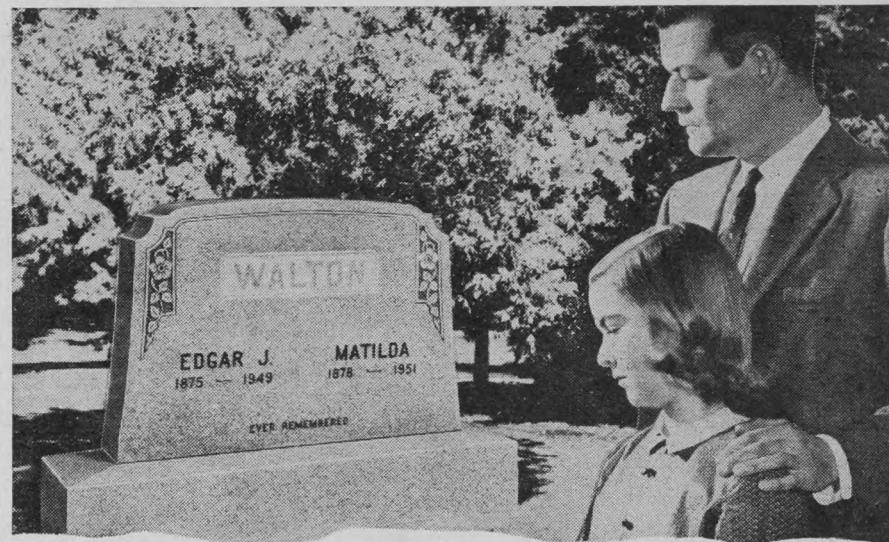
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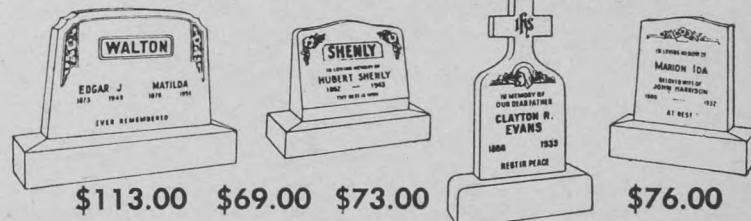
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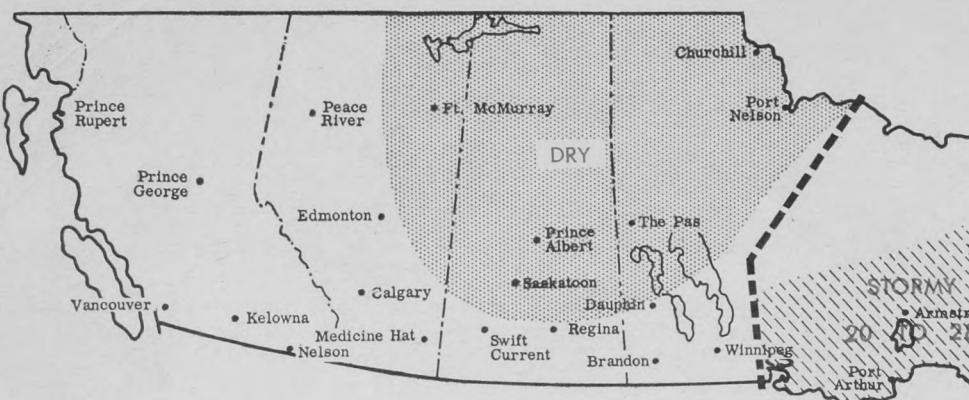
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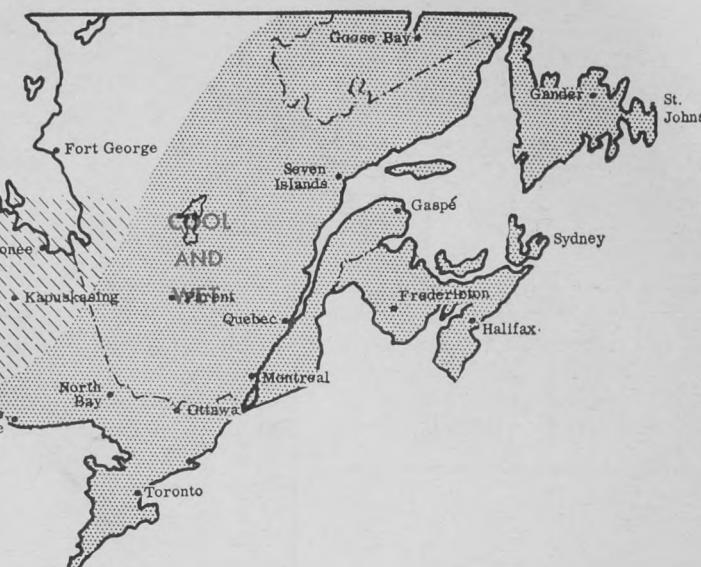
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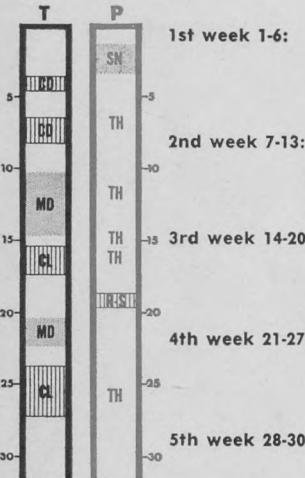


**APRIL HIGHLIGHTS:** Central Ontario eastward through the Atlantic Provinces will experience colder than normal weather. It will be cooler than usual in northwest Alberta, otherwise the Prairies will have average temperatures. Precipitation will be above normal in the Atlantic Provinces, southern Quebec and Ontario. Less than normal in Alberta and Saskatchewan and near normal in other areas.

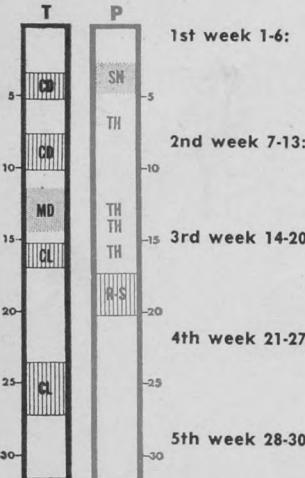


## APRIL 1963

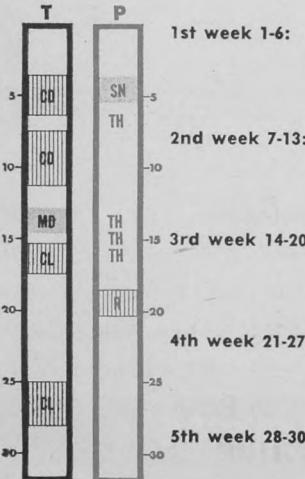
### Alberta



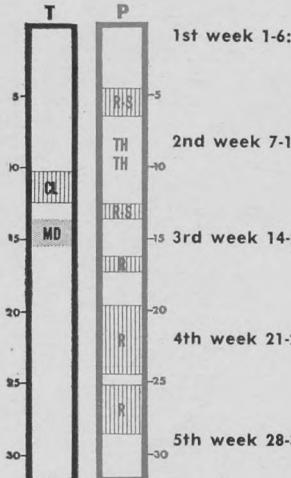
### Saskatchewan



### Manitoba



(Allow a day or two either way in using this forecast. It should be 75 per cent right for your area, but not necessarily for your farm.—Ed.)



### Ontario

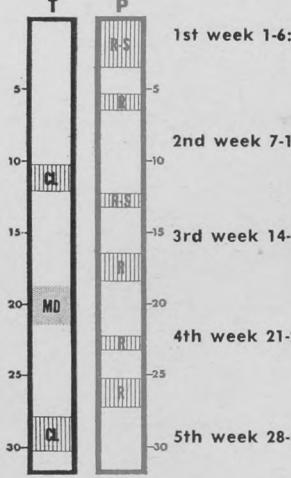
Stormy toward the end of the week with widespread snow in northern areas. Rain in southern sections around 5th and 6th. Strong winds during the stormy period. Temperatures seasonable on most days.

Unsettled and threatening on 8th and 9th. General precipitation likely toward the end of the week. Seasonable temperatures will be lowered on 11th-12th. Nighttime temperatures will drop into the teens.

Mild the first two days with afternoon temperatures reaching into the 50s and lower 60s. A storm will move across by the 17th, another one will affect most areas at the week end.

A poor week for outdoor work. Storms expected to affect the province intermittently throughout the week. Most days will record temperatures in the 50s and 60s.

Storminess will linger into the 28th with conditions improving thereafter.



### Quebec

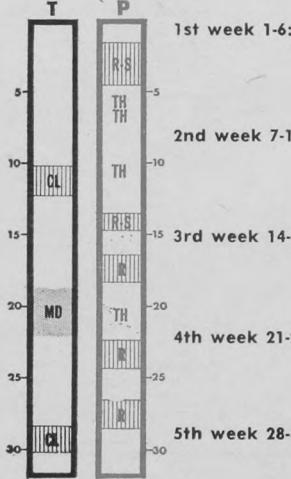
Storms will affect most sections between the 1st and 3rd and again about the 6th. There will be little day-to-day temperature variation, most days in the 30s and 40s.

Generally pleasant spring weather during the first half of the week. Turning colder on the 11th and 12th with precipitation developing in most areas on the 13th.

Rain expected in the southern regions around 17th-18th, otherwise a storm-free week. Seasonable temperatures indicated during the first 4 or 5 days. Mild toward the end of the week.

Remaining mild on the 21st (60s). Rain will be general on the 23rd, also 26th-27th. Frequent cloudiness during the week will hold daytime temperatures at slightly lower than normal levels.

This interval will be highlighted by fair, cool weather.



### Atlantic Provinces

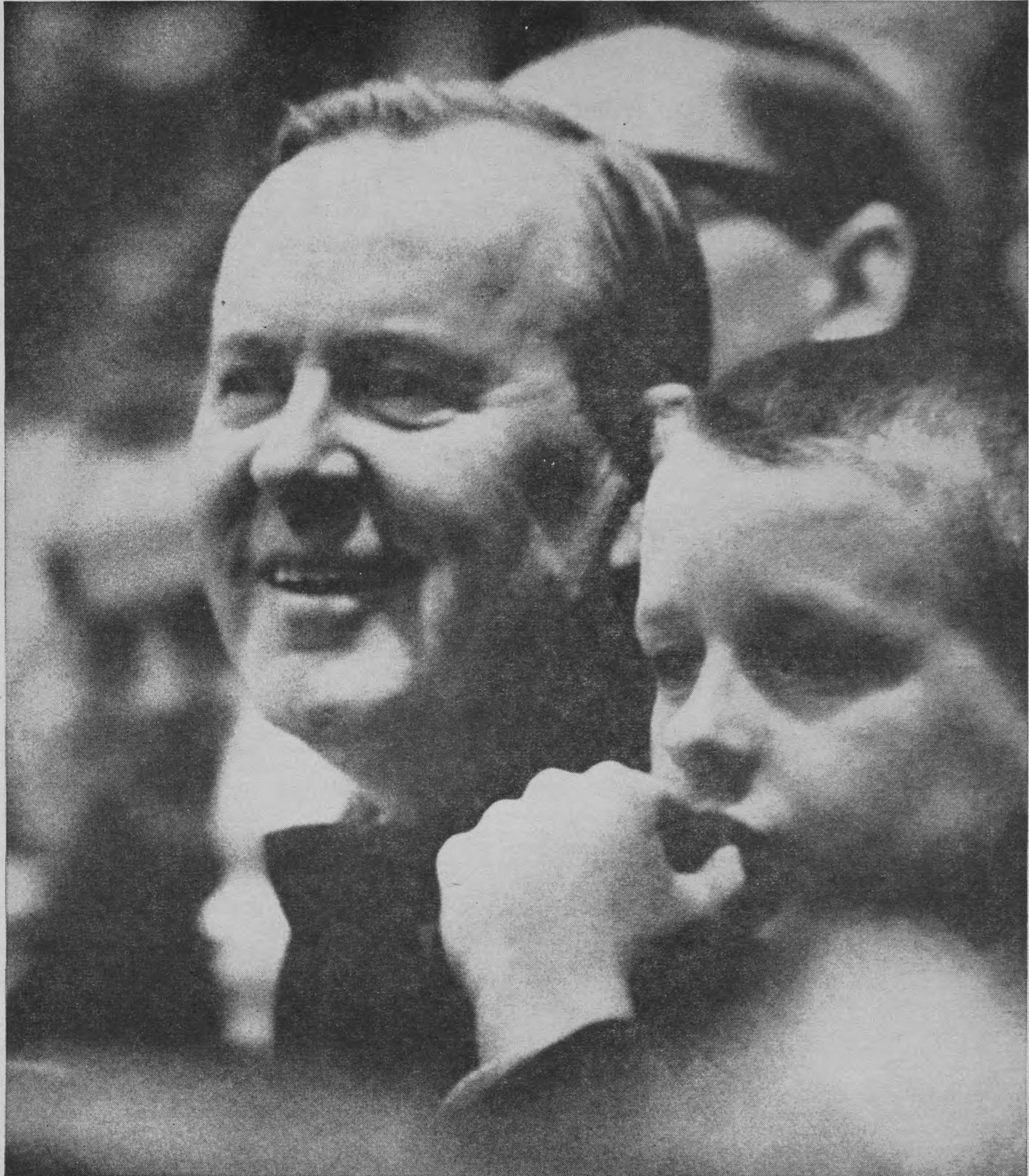
Most days will be cloudy and threatening during this week. More general storminess is expected to last between the 2nd and 4th, throughout most of the area.

No important storms expected although conditions will be threatening on the 7th and 11th. Daytime temperatures will be in the 35 to 45 degree range, colder 11th-12th.

Expect showery weather again on 14th and 17th-18th. Afternoon temperatures will be mostly in the 40s but should rise into the 50s toward the end of the week.

Continuing mild early in the week with more seasonable temperatures around the 23rd. Several storms will affect the provinces. More precipitation will occur on the 23rd and 27th.

Showers will continue into the 28th. Cooler, drier air will spread on the 29th and 30th.



## this man cares

He cares about the kind of world his grandchildren will grow up in. He cares about his country. He wants it to grow and prosper so that everyone willing to work can find a job at a fair wage. He cares about all young people in school, particularly those leaving school this year. No one of them should be forced to quit school because they can't afford to continue. □ He cares about how proud we can be as Canadians. A stable Parliament, a government with purpose, a government

that speaks with reason and acts decisively for the people . . . he cares most about these because they will build a better Canada. □ Hon. L. B. Pearson leads the Liberal Party of Canada—the party that insists on social progress for all Canadians, social progress that will come from a restored and prospering economy. □ Give Canada government with purpose. Vote for your Liberal candidate. To restore stability to Parliament, turn to the Liberal Party on April 8. **IT'S TIME FOR ACTION • VOTE LIBERAL**

# Editorials

## Majority for Minority

THE election of a minority government last June was described on this page as "highly unsatisfactory." At the time it was as predictable as night follows day that instability and indecision in the governing process of this country would result. It was also apparent there would be a babbling of tongues in Parliament—a vigorous, vocal exercise in political maneuvering by all parties—without any real work being done to deal with numerous and weighty domestic and foreign problems which had been building up, and which awaited federal action. After the short and futile life of the 25th Parliament, it is no consolation whatsoever to know that what was predictable and apparent has happened.

While the life of the "House of Minorities" ran true to form, the results have been worse than anticipated in certain respects.

At the very outset, there was either an inexcusable misunderstanding or outright dishonesty, or both, on the part of Prime Minister Diefenbaker over the foreign exchange crisis. And there was the resulting need to plunge Canada into an austerity program at a time of relatively high unemployment and economic stagnation. This need, of course, came about due to the previous mismanagement of our monetary and fiscal policies.

There was a shocking disregard for parliamentary democracy in Mr. Diefenbaker's decision to speak for Canada at the Commonwealth Prime Ministers' Conference on important trade matters before calling into session the new Parliament in which his Progressive Conservative Party no longer held a majority.

There was the failure of the Government to get the current year's departmental expenditures before Parliament, or to bring down the spending estimates and budget for the ensuing year. Charges of obstruction against the opposition are scarcely an acceptable excuse for this irresponsible delay.

Finally, of course, there was the flight of senior ministers from the Diefenbaker Cabinet, at the time of dissolution, over indecision on defence policy, and anti-American sentiments.

It is little wonder people are saying that what we have had as an excuse for national government is far from good enough.

WHAT we all must consider, and consider more seriously than we have in a long time, is where to place our support in the Federal election of April 8. Each of us must decide what is in the best interests of our nation, irrespective of our former political ties and our narrow special interests—including farm interests. The "what's-in-it-for-me" attitude must surely give way to the broader responsibilities of the day.

An assessment of the current situation throws these issues into sharp relief.

Canada needs a government with a clearly defined, imaginative set of goals for the nation, and with a specific, and comprehensible set of plans and priorities to achieve such goals over the next few years. We live in an age of economic and social planning where innovation and co-operation are needed, both in our work at home and in our relations with other nations, especially our neighbors and allies.

Such a government requires sound, consistent and unmistakeable leadership with dogged determination to obtain the set goals. The leader of such a government would need the support of those with the courage to do the necessary, if sometimes unpopular, things to restore our economy to full employment.

Such a government, as we pointed out in our January issue, will need to take new, bold steps in the field of trade. There is evidence of a gradual drift to more protectionism and even isolationism. The world outside our borders has been changing rapidly. The fundamental root of our economic problems is the growing competition for markets arising out of the second industrial revolution in Europe, and the spread of industrialization to the developing countries. For a country that is as dependent on trade as Canada is and will remain, the only hope it has of maintaining a high and rising standard of living in today's world is by industrial specialization and technical improvement of the goods it can produce more efficiently than its competitors in world markets. This calls for a low or even zero tariff, not a protectionist policy.

IF such needs are to be met, Canadians should elect a stable majority government on April 8. It is a prerequisite to putting our own house in order, and to taking our proper, if modest,

## Flies in the Ointment

THE use of western feed grains for expanding livestock production in Eastern Canada was the subject of a lengthy item in the "Farm News" press clip sheet, issued by the Canada Department of Agriculture on February 6. The opinions and information it contained were credited to a "spokesman" for the Department. Both the form and content of this release must be challenged.

This particular item should have been credited to the Minister of Agriculture rather than to some anonymous "spokesman" for his Department. It was obviously intended to persuade one and all of the soundness and value of new legislation the Minister was about to introduce in Parliament when dissolution came. It was therefore political in nature. It is one thing to use the regular news service of the Department to explain and publicize policies once they are enacted in legislation. It is quite another thing to use these same services to promote a certain policy which is not yet approved by Parliament and in effect.

Such misuse of the Department's news service is detrimental. It casts an unfavorable reflection on the Minister and whoever else was responsible for the release, and it places suspicion on future releases that are credited to departmental spokesmen.

ANOTHER and much more important point troubles us about this release. Here is what the last paragraph has to say: "The difficulties are great but the stakes are high. Foresighted planning and co-ordination, assisted by necessary legislation, can smooth the path for a greatly expanded livestock operation in Eastern Canada. This would provide greater income opportunities for producers to meet the needs of the home market and would simultaneously give a steady market for a much larger volume of Western feed grains."

Now, on the surface, this sounds great—great for the Eastern farmer who wants to expand or go into beef, hog or poultry production, and great for the Western farmer producing feed grains. But, unfortunately, there are at least a couple of flies in the ointment to be applied.

Fly number one is the fact that there happens to be a lot of livestock and poultry

place in the councils of the nations. It is axiomatic that we cannot obtain the respect of other nations if we cannot do a better job of running our own affairs. Moreover, we cannot contribute effectively to the solution of one of the world's major problems—that of closing the gap between the developed and less developed countries—if we continue to flounder with instability and mismanagement at home.

The Federal election has been called. The Canadian people will decide. They were confused at the time of the last election, and little has happened since in any of the political parties seeking office to commend them clearly to the electorate. This places great stress on the parties in the remaining weeks of the campaign. Past and broken records of performance, worn-out cliches, vague explanations and promises will not do. Canadians are a literate people capable of sound judgments. The issues are not too complex for the layman to understand. Politicians must stop talking down to the people and face up to their responsibilities of stating exactly where their respective parties stand.

Will the political parties rise to the challenge? Will a party emerge that a majority of the Canadian people can support? We don't know, but we hope that one does. Because if a majority viewpoint doesn't arise out of the campaign, Canada can only sink further into the quagmire of its own making, and the rest of the world will leave us behind. V

producers in the Prairie Provinces, and a fair number of farmers in the East who produce feed grains. They are in direct competition with their respective counterparts in East and West. They may, with justification, take a dim view of any new Federal legislation which is designed to favor livestock expansion in the East and feed grain production in the West. They are already smarting from government intervention with the law of comparative advantage brought about by the feed freight assistance program. This transportation subsidy places them at a competitive disadvantage.

Fly number two is the fact that the Canadian Wheat Board—a marketing agency of the Federal Government—is charged with the responsibility of selling Western wheat, oats and barley in the best interests of the Prairie grain grower. The release suggests strongly that the Board must work effectively and show a willingness to co-operate if the desirable expansion of livestock in Eastern Canada is to take place. Lecturing its own Board in a news release strikes us as odd as it is naive. How can the Board properly carry out its function without the inevitable differences that arise between buyer and seller over price?

THIS statement from the Federal Department smacks too much of political expediency and regionalism for our liking. It infers that beef and other livestock expansion should occur in the East (where the bulk of the population is) rather than in the West, and that the chief role of the Western farmer should be to produce feed grains to facilitate this development. While appearing to condone more self-sufficiency in Eastern livestock production, it very conveniently avoids any reference to the Government's feed freight assistance program with its discriminating features. No reasonable person would deny that there is a place for expansion of livestock production in the East. But surely this should come about by competitive rather than subsidized means.

The Agricultural Stabilization Board, another agency of the Government, has extolled the virtues of the law of comparative advantage in a reference paper rejecting the idea of regional deficiency payments. The Government can't have it both ways. We urge that a more consistent and less expedient approach be taken to agricultural policy. V

# GUIDE POSTS

UP-TO-DATE  
FARM MARKET  
FORECASTS

**BEEF CALF CROPS** in 1963 in both Canada and the United States will be about 5 per cent larger than last year. Thus increased marketings of feeder cattle are likely in the fall of 1963 and early 1964, which will result in some general weakening of prices.

**STRONGER EGG PRICES** are likely in 1963 because the laying flock is about 5 per cent smaller. National average price for Grade A large is expected to be at least 37 cents.

**WHILE DURUM WHEAT** marketings continue heavy, with about half the crop moved off farms, exports have not kept pace. This has resulted in sharp increase in elevator stocks.

**DEMAND FOR HIGH PROTEIN FEEDS** on world markets continues to expand and prices this season have risen sharply. This trend is partly offsetting effects of lower oat and barley prices in prepared feeds mix.

**HOG PRICES** will probably weaken in late winter, and for next 12 to 15 months remain moderately lower than year earlier levels due to build-up of hog enterprises.

**POULTRY PRICE PROSPECTS** for 1963 will be dampened by sharply increased spring supplies along with strong competition from beef and pork.

**BARLEY EXPORTS** are at the lowest levels in years--4 million bushels at the half-way mark of this crop year as against nearly 20 million a year ago. There may be some pick-up in spring sales.

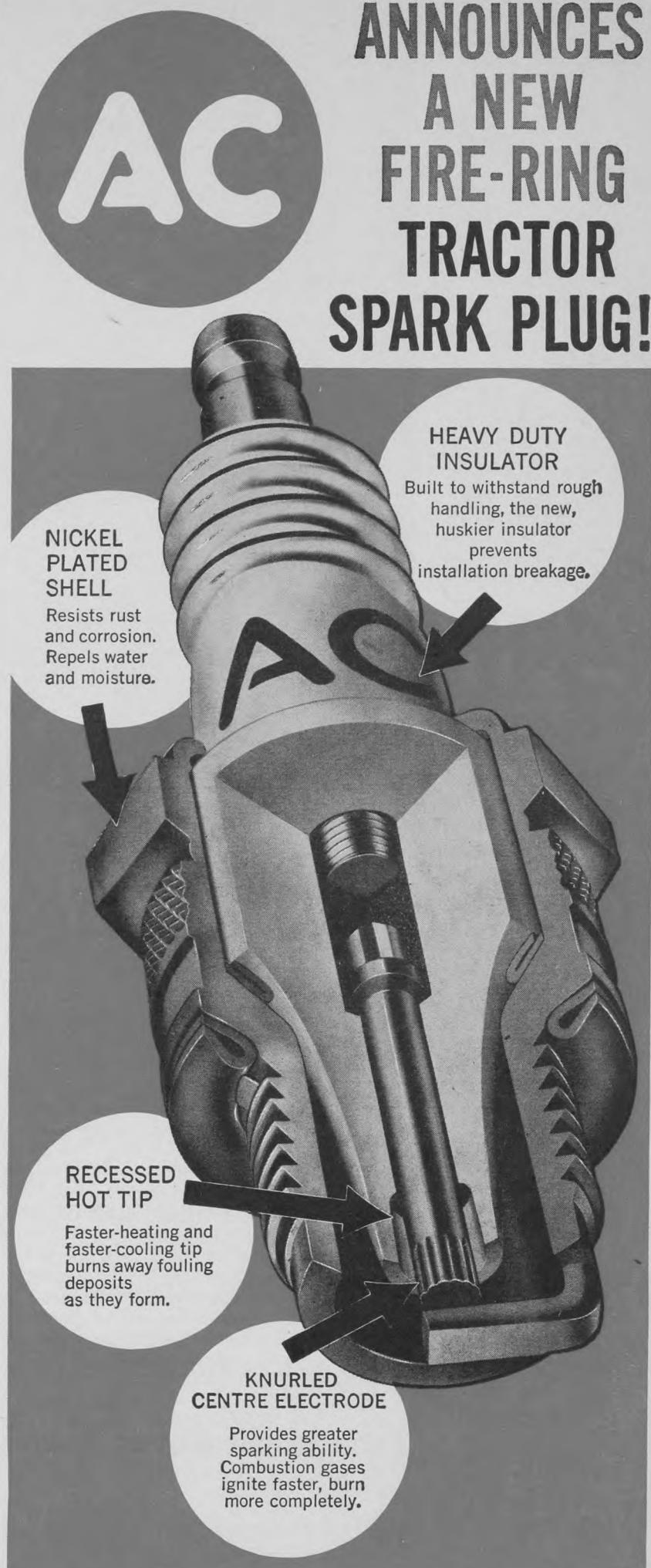
**FED CATTLE PRICES** dropped sharply in January but little further decline is expected until late spring when choice steers in Calgary may drop another dollar to \$21.00 per cwt. range. Prospects are good for rising prices in last half of 1963.

**WORLD SOYBEAN PRICES** have been jumpy since the New Year reflecting rapid disappearance of the 1962 crop in the U.S. and some speculative activity. However, supplies are likely to be large enough to prevent run-away prices.

**SLAUGHTER COW PRICES** are currently strong and could pick up another dollar or two by late spring when marketings are seasonably low. However, prices are expected to drop below 1962 levels this summer and fall due to larger fed cattle and hog marketings.

**U.S. FEED GRAIN SURPLUS** is being reduced rapidly and by end of this crop year carryover stocks will be at reasonable levels. Next fall may see prices rising, since schemes to divert acreage out of feed grains will still be in effect this spring.

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JOHN DIEFENBAKER

# Canadian Farmers Know the Facts!

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Farm surpluses are disappearing

Farm opportunities are developing

Farm credit is expanding

Farm prices are stabilized

Farm income is at an all-time high



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**CONFERENCE RECOMMENDS  
DAIRY ADVISORY COMMITTEE**

The two-day Canadian Dairy Conference, which was held in Ottawa in February, made a single recommendation—the establishment of a Canadian Dairy Advisory Committee with official status. The function of the Committee would be to consult and advise Federal and provincial governments and industry groups on any aspect of dairy policy.

The Conference, which was called by producer organizations, had as its purpose the searching out of ways of better meeting the short and long term problems of the dairy industry. It was held in-camera and attended by some 75 delegates from the Federal and provincial governments, and from national farm, trade and co-operative associations.

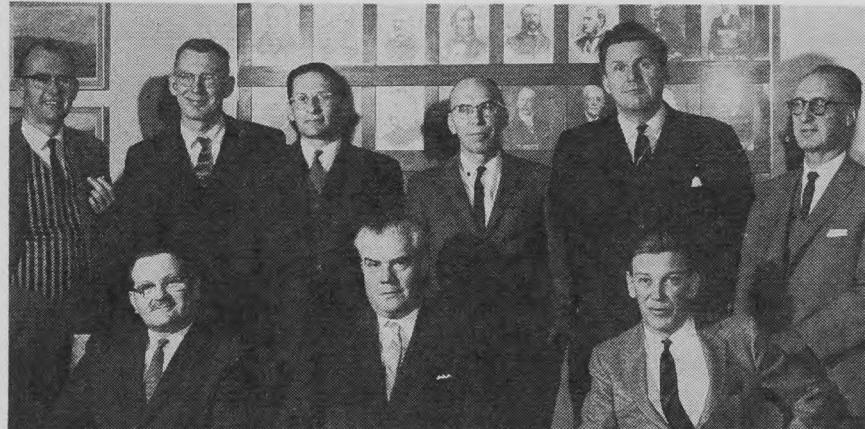
The Conference press release indicated that discussion centered on two main subjects: (1) Federal dairy stabilization policy; and (2) development of a national organization for consultation, co-ordination, regulation and marketing in the dairy field in the interests of producer, processor and consumer.

With respect to the first subject, the Conference did not attempt to reach agreement, but a wide range of useful views on stabilization policies were reported to have been expressed. On the second subject, the Conference agreed on the need for the establishment of the Advisory Committee.

The Conference expressed this need in these terms:

- It recognized that for some areas of dairy policy at least, the development of national policy for the industry is inevitable and desirable.
- It recognized that there are other areas of dairy policy where there are direct advantages to be gained from co-ordinating action on a national basis.
- It recognized that existing areas of Federal and provincial dairy policy and authority are interrelated in their effects on the industry, and therefore require co-ordination if they are to be equitable and effective.

Opinions at the Conference were reported to have varied with respect to the need for a "National Agency" presumably with authority in the field of regulated marketing. It was stated, however, that this should be made the subject of continuing study by the proposed Advisory Committee. ✓



Seated center is the chairman of newly appointed Research Directorate, Dr. J. R. Weir, Dean of Agriculture, University of Manitoba. He is flanked on the left by Dr. Marc Tremblay, the vice-chairman, and W. F. McLean of Toronto. Standing from l. to r. are: Dr. B. H. Kristjanson, David Kirk, Dr. Meyer Brownstone, Dr. W. J. Anderson, Dr. William Y. Smith and Dr. W. H. Cook.

## What's Happening

### NEW ASSOCIATE EDITOR

The Country Guide takes pleasure in announcing the appointment of Jim Barnett to the position of Associate Editor. He succeeds Richard Cobb, who has resigned to join the Information Division of the Canada Department of Agriculture at Ottawa. Mr. Cobb served our readers with distinction and dedication for more than 7 years. We wish him every success in his new responsibilities.

Mr. Barnett came to Canada from Scotland 4 years ago. He is a graduate of Lawers College of Agriculture and has had extensive experience in the livestock field. His last position in his native country was a 3-year stint in AI work with the Aberdeen and District Milk Marketing Board.

Not long after his arrival in Western Canada, Jim entered the farm writing field, and has served with both the Manitoba Co-operator and the Winnipeg Free Press daily as Agricultural Editor.—Ed.



JIM BARNETT

### COUNCIL RESEARCH DIRECTORATE MEETS

The newly appointed Research Directorate of the Agricultural Economics Research Council of Canada held its first meeting in Ottawa recently.

Members of this 9-man body have the responsibility for developing a continuing program of independent research in the sciences of agricultural economics and rural sociology. The purpose of the program is to close the gaps in these fields of study, and thus strengthen the agricultural industry. ✓

The Directorate reviewed its terms of reference, elected its officers, made plans for the appointment of a full-time Director of Research for the Council. It also held preliminary discussions on procedures to be followed in getting the research activities of the Council underway.

During the meeting J. R. Weir of Winnipeg was elected chairman of the Research Directorate. Dr. Weir is dean, Faculty of Agriculture, University of Manitoba. Dr. Marc Tremblay of the Department of Sociology at Laval University was chosen vice-chairman.

Other members appointed to the Directorate by the Council's Board of Governors are: W. J. Anderson,

chairman, Department of Agricultural Economics, University of British Columbia, Vancouver; Meyer Brownstone, Deputy Minister, Saskatchewan Department of Municipal Affairs, Regina; W. H. Cook, director, Division of Applied Biology, National Research Council, Ottawa; David Kirk, secretary, Canadian Federation of Agriculture, Ottawa; B. H. Kristjanson, special projects advisor, Canada Department of Agriculture, Ottawa; W. F. McLean, president, Canada Packers Limited, Toronto; and W. Y. Smith, head, Economics Department, University of New Brunswick, Fredericton. ✓

### FARM CASH INCOME MAKES RECORD

The Dominion Bureau of Statistics estimates that farm cash income (excluding supplementary payments) reached the all-time high of \$3,081 million in 1962, 4.3 per cent above the previous record set a year earlier. These estimates include cash income from the sale of farm products, CWB participation payments on the previous year's grain crops, net cash advances on farm-stored grain in Western Canada and deficiency payments under the provisions of the Agricultural Stabilization Act. Supplementary payments to farmers during 1962 totalled \$70.3 million. These were paid out under provisions of the Prairie Farm Assistance Act and the Western Grain Producers' Acreage Payment Plan. ✓

### STOCK GROWERS OPPOSE FEED GRAIN SUBSIDY

At the 67th annual convention of the Western Stock Growers' Association, held in Red Deer, Alta., the end of January, members again let it be known that they stand for free enterprise. Their first resolution expressed strong opposition to the present trend toward paternalism in government, a growing bureaucracy and creeping socialism.

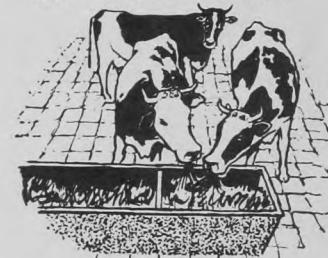
The meeting asked that Federal and provincial governments administer community pastures in such a way that they will no longer be a

(Please turn to page 75)

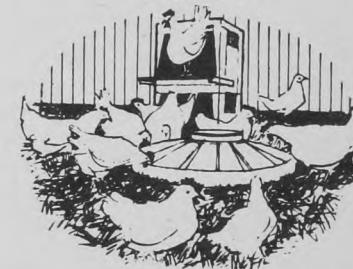


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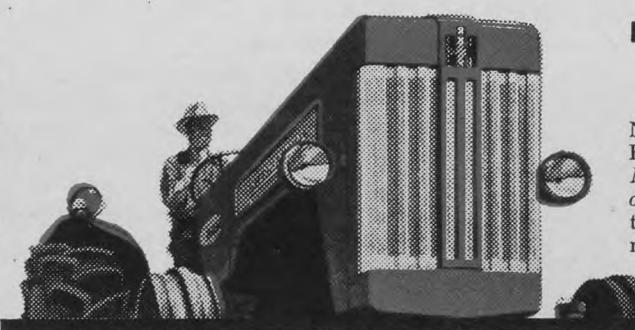
**HUNDREDS OF THOUSANDS** of owner-hours in '62 proved again the rugged reliability of IH Multi-Range power! Smooth, high spirited power, delivered at low engine rpm's. Big, productive power that makes large fields seem small—that drives pto equipment through heaviest crops without plugging—that breezes through lighter jobs without overspeeding the engine—that stretches a tank of fuel over acres and acres more work. Happy-handled power, too, with great operator comfort that beats long-hours fatigue.

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Harvester introduced the famous Torque Amplifier ten years ago. Since 1953 it has been field-proved on hundreds of thousands of IH tractors and in over one hundred million farm work hours.

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**Experts estimate that seed treating could increase profits on an average of \$437.50 per farm. Too many acres of wheat, oats, barley and flax are seeded untreated every year with the result that too many farmers are not getting the yields and profits they should have.**

**This is profit you cannot ignore — profit which can be yours through proper seed treatment.**

### RECOGNIZE THE PROBLEM

Uneven stands of crop, low yield areas in a field, poor or spotty germination, could be signs of damage caused by wireworms and/or seed-borne disease. These pests will reduce your crop's full potential value and profit. Do you recall any of your fields showing these signs in previous years? If so, be prepared this spring, treat your seed and avoid crop losses due to disease and wireworms. If not, why take a chance? Treat your seed and be sure!



### SEED DRESSINGS AND THEIR VALUE

Farmers annually lose an estimated 60 to 70 million dollars worth of cereal crops because of wireworms and disease. Time and again, extensive tests made across Canada prove beyond doubt the value of treating seed. These tests show that seed dressings can increase yields by 5 bushels per acre or more by killing wireworms and controlling disease. Often the seed in the ground is at a great disadvantage because the soil at planting time is cold and wet — other times too dry—for seed to germinate. Under such conditions seed dressings will give much needed protection with the result that a good healthy stand may be produced in spite of poor growing conditions.

### THE INVESTMENT

For only a few cents per acre, you can be insured against losses caused by wireworms and disease — an investment in seed dressings is one which will provide you with greater yields and better profits at harvest time! "Mergamma" Liquid and "Agrosol" are test-proven products which have been delivering extra profits through greater yields to farmers for several years. Both products are made in western Canada and fully adapted to Canadian conditions. "Agrosol" disinfects the seed before planting. Although seed grain may appear free from disease, many organisms may be present on the surface of the seed. If not controlled these organisms could infect the plant produced with smuts and other fungus diseases. "Agrosol" is a disinfectant and destroys these organisms carried on the seed surface.

"Agrosol" protects the seed after planting. The soil into which seed is planted is teeming with countless living organisms. Many of these are beneficial, but some are harmful. Such organisms may cause the seeds to rot before they germinate. Other organisms may attack the small seedlings causing seedling blights. Properly treated seed, carrying a uniform coating of "Agrosol" is protected against attack by disease organisms. If the seeds and the seedlings are protected against attack, emergence is earlier, more uniform and growth is more vigorous.

"Mergamma" Liquid contains a combination of liquid mercury and heptachlor, thus giving dual protection against seed-borne diseases and wireworms. Millions of acres in Western Canada are heavily infested

with wireworms. Large bare or thin patches in a field are probably indications of wireworms. Close examination will show that the germ of the seed may have been eaten before it could germinate.

The seed may have germinated before attack by wireworms. In this case the young seedling will have a dry, withered centre leaf or be completely dead. Excavation will reveal the chewed tissues of the seedling just below the soil surface. This young seedling may die from the shredding or from disease organisms which enter the wound. If it recovers, it will probably be ten days to two weeks later

in maturity thus giving rise to "green berries" in the grain sample at time of harvest.

"Agrosol" and "Mergamma" Liquid are not substitutes for good seed, but they will give good seed a chance to do its best. When it is necessary to use damaged seed, (for example, flax seed which is often cracked or damaged in threshing) the protection offered by seed dressings is more important than ever. Give your seed the extra help and protection which pays off in heavier stands and better profits. Treat your seed with "Agrosol" and "Mergamma" Liquid — 13 years proven best across the West.



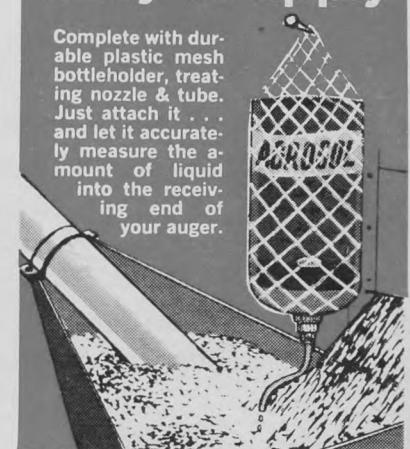
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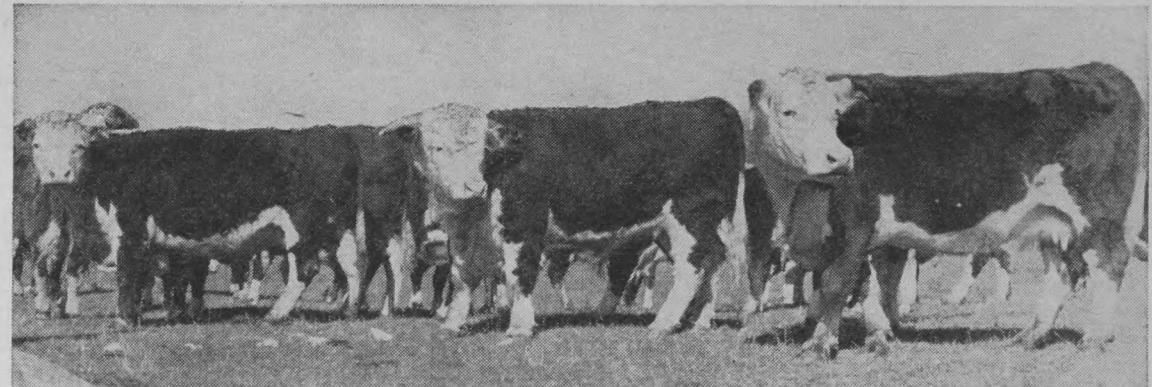
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PROV. .....

# He Gets the Calves He Wants



[Guide photos]  
The Lundman herd sire flanked by two cows. The pasture being used was still in good shape in October.



Some of Lundman's cows and calves, which produce top-quality carcasses and breeding stock.

**P**ERFORMANCE testing has proved to me that my heifers are producing calves that have the same fine ability to gain as themselves," says Cliff Lundman of Erickson, Man. He has almost 5 years of performance testing records to draw on.

Lundman's herd of 120 Herefords includes 25 purebred cows and an equal number of grade cows, with the balance made up of young replacement heifers and steers. He has his own scales, which came from an elevator and now are built into a well-planned squeeze and loading chute system. Livestock specialists from the Manitoba Department of Agriculture weigh and score the progeny on the farm at weaning in the fall, and again on about May 1, after 180 days. They have told him that his weighing and handling system is the best they have encountered.

He keeps replacement heifers which are scoring 1 and 2, and are producing calves in the same class. Some have had their second calves and the quality still holds. He also sells 6 to 8 bulls annually at 1½ years old.

Another thing Cliff has noticed since he started to keep performance records is that he has been able to adjust the rations so that he gets substantial gains with fewer pounds of grain than he used to feed.

He has also compared gains made with self-feeding and with hand-feeding, using the better types of steers for the test. He found that 7 self-fed steers gained 3 lb. per day on 20 to 22½ lb. of feed, while 21 hand-fed steers needed only 15 to 16 lb. of feed to gain 3 lb. Consequently, he thinks the only advantage in self-feeding would be if there was no time to feed by hand. He has a good hired man, so there is no labor problem.

Last year's test period showed that Cliff Lundman's steers were gaining about 2 lb. per day from weaning in the feedlot, heifers 1.80 lb., and bulls 2.10 to 2.15 lb. That was without pushing them before the New Year, because he feels that it is a mistake to commence heavy feeding early in the period.

**T**H E regular starting ration is 5 to 6 lb. of rolled oats per day for about 2 months. Then, he increases it gradually every 2 weeks and introduces the heavier grains—wheat and barley—until they are getting up to 15 or 16 lb. per day at 14 to 16 months.

A packer-buyer comes from Neepawa and purchases the steers in the yard for eventual shipment to Winnipeg. Lundman did try selling them on dressing percentage one year, but discovered that it made no difference to the price, as long as he continued to ship top-quality cattle. One of

**Cliff Lundman's Herefords not only look good, but he is able to prove that they are good**

by RICHARD COBB

Field Editor

his shipments of 23 turned out to be 21 red brand carcasses and 2 blue. The packer has told him that his are the best steers he ships to the plant.

"It's not just luck," Cliff points out. Looking back over his 4 or 5 years in performance testing, he says he can easily pick out the consistently good cows—the ones that produce the best breeding stock. He keeps a separate page in his record book for each cow—purebred or commercial—and can see at a glance what heifers she has produced over the years. Even when the cow has to go to slaughter, he can still follow her record through in her heifers. He finds it is a great help, in this connection, to belong to the Western Manitoba Farm Business Association, which is supervised by the farm management staff of the University of Manitoba. They give him sound advice on keeping records and making full use of the information.

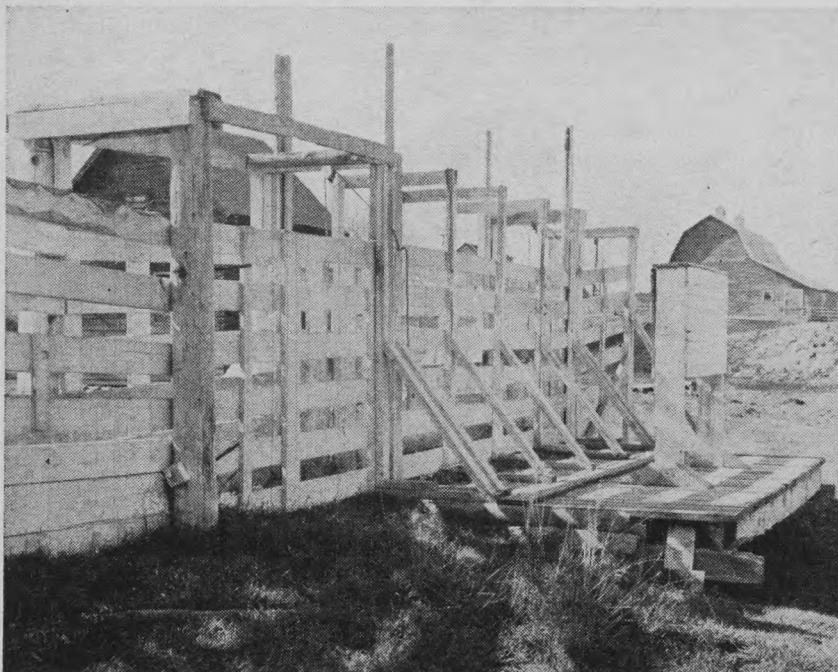
Lundman has not been able to detect any difference in the general level of performance between his purebred cows and the grades. Some of the grades have every bit as good conformation as the best of the purebreds have. The grades are, in fact, purebreds in everything but name. These are cows from a long line of careful breeding but they were never registered. The standard remains high because Cliff and his father have used registered bulls for about 40 years.

**B**EING in the purebred business, Lundman castrates all of the grade bulls. He sells only grade heifers, because he wants the purebreds as herd replacements. However, he now has about 50 cows and heifers for breeding purposes and reckons that these will be enough, considering the amount of land he has and the labor that is available. So he may be having a reduction sale one of these days.

The Lundman farm covers 690 acres, including 350 cultivated acres. He believes that he has struck about the right balance between crops and livestock now, and particularly if he takes into account the ever-present threat of a dry year.

Cliff Lundman certainly had no need to worry about feed this winter, after the exceptional harvest of 1962. His second-crop oats yielded 110 bushels per acre, barley on summerfallow went to 90 bushels, wheat yields were 40 to 50 bushels, and he had some third-crop mixed grains that produced 50 bushels per acre. In addition, there was mountains of straw and he had lots of hay, too. His cattle were able to stay out on pasture until well into the fall.

"That was sure a wonderful year for crops," he says. "Beef prices were pretty good, too." ✓



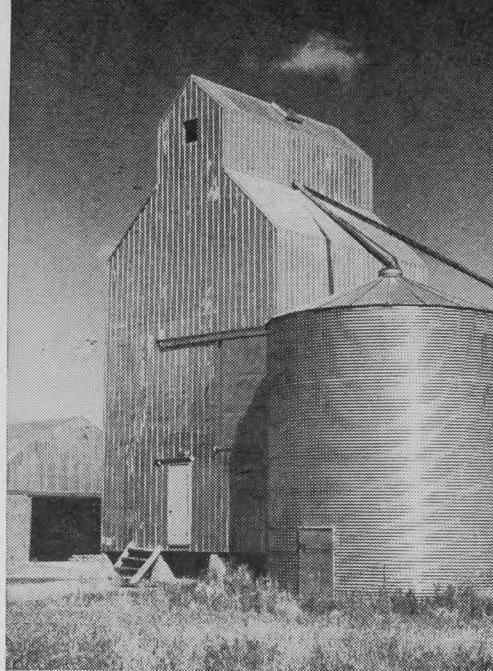
Cattle chute and squeeze running over scales to the loading ramp were designed and built by Lundman. Weigh scales are built into the slope.



Cliff Lundman has used P.T. to good advantage.



Straw from this grass seed field is salvaged for hay, while the aftermath is grazed as late summer pasture.



The Pugh cleaning plant and bulk seed granary. New storage shed in background.



[Guide photos  
Albert (left) and Fred Pugh in their feedlot. They buy their feeders on the public market in the fall.

# Full Capacity Production

by CLIFF FAULKNER

Field Editor

*By sowing cover crops and feeding seed by-products to livestock, these farmers make every acre count*

A MANUFACTURING firm that can turn its by-products into cash seldom goes under. The same can be said for any farm. That's the way brothers Albert and Fred Pugh of Holbein, Sask., operate their combined seed and cattle business. Nothing is wasted.

When a seed grain crop is cleaned, screenings become feed for their commercial beef herd. The baled straw provides an ample supply of bedding. Straw from grass and oat crops is used for either hay or silage, while the aftermath is grazed as late summer pasture. When the brothers find a stand of wild oats growing in one of their grain fields, they swath it out early in the season, then turn the wild oats into silage.

"If you get it before it has a chance to set seed, you can cut down on next year's wild oat crop," Fred pointed out.

There are very few idle acres on the Pugh farm. Land sown to slower-growing crops, such as Russian Wild Rye and Crested Wheatgrass, often has a cover crop of grain so it'll bring a cash return in the first year. Low, wet spots aren't just left to produce bulrushes. The brothers have gained 45 extra acres of hay by sowing these to moisture-tolerant Reed Canary Grass.

Said Albert, "When we told an Ontario visitor about this he couldn't get over it. Back home, he runs a successful hog, beef and poultry enterprise on 45 acres."

The Pughs began their farm partnership in 1945 when Albert returned from service with the R.C.A.F. Starting with their original home farm, the brothers added land until they now own a total of three sections. Last year they rented an extra section from a neighbor so they actually farmed four sections.

"Just about all our grain crops are grown as potential seed," Fred Pugh explained. "We soon found out we could easily sell all the grain that had been put through a cleaning plant. As there was no plant in this area, we decided we'd better build one of our own as soon as possible."

TODAY, the Pughs have a cleaning plant that is a model of neatness and efficiency. Grain is unloaded into a concrete pit at ground level and elevated to four 400-bushel bins at the top of the building. From there it flows by gravity to three cleaning machines. These include a Carter disk (for length separation), an indent machine and a 290 Clipper for width and air (weight) separation. Most of the wheat and barley seed is sacked on the ground floor, and stored in a 44 ft. by 80 ft. metal-covered shed across the yard. Bulk seed—mostly oats—is lifted into two metal storage granaries located on the east side of the plant. Screenings destined for the farm's cattle feedlot are blown into two similar granaries on the north. Grain seed is marketed through a Moose Jaw Co-operative.

Grass seed, which is sold through the North Saskatchewan Alfalfa Growers Co-op in nearby Prince Albert, is cleaned off the farm. Cleaning it at home would mean the machines would have to be refitted with smaller screens. Putting about 80,000 lb. of seed through the plant per season would also use up a lot of valuable time.

"At present we can get by with one permanent helper, plus an extra one during summer months," Albert explained. "We're much too busy to tackle a job like that."

The Pughs also clean grain for a few other seed growers in their area, but they don't go out of their way to seek custom work. Their own annual grain seed crop of 30,000 to 40,000 bushels justifies the plant's existence.

A small part of the farm's acreage is used to grow "Foundation" seed stock for their own use. This seed is then sown in the larger fields to produce first generation "Registered" seed for sale. The brothers can go on producing their own Foundation stock as long as it meets standards set by the Canadian Seed Growers' Association, of which they are members.

For barley seed, the Pughs specialize in the Keystone, Betzes and Jubilee varieties. Their

other grain seed crops are Rodney and Garry oats, and Canthatch wheat. Most of their grass seed production is Fairview Crested Wheatgrass. Straw from the barley and wheat fields is generally baled for bedding, while oat and grass crop by-products are put up as hay or silage.

THE farm has two bunker silos with a total capacity of about 2,000 tons. One is a 24 ft. by 100 ft. permanent structure made of tilt-up concrete slabs. The other, a 48 ft. by 200 ft. earthen silo, was made by simply pushing excess dirt from the seed storage shed site into two long piles. Both are about eight feet deep. Silage includes cuttings from a 200-acre brome-alfalfa pasture, sweet clover and the seed crop by-products.

The silos are located on light, well-drained soil. Spoilage is kept to a minimum by covering ensiled crops with a plastic sheet overlain by a layer of straw.

The brothers buy feeder calves in the fall at the Prince Albert public market. These are fed overwinter on silage, plus a little grain. About May 1, the animals go on grass until early in July, then they are finished on silage and grain. They are marketed during August and September. Most of the 350 steers fed each year are sold through the Saskatchewan Wheat Pool's livestock division.

Like most successful enterprises, the Pugh farm is operated with an eye to keeping production "machinery" (in this case, the soil) in first-class condition. Stubble fields are cultivated so as to leave trash on top to prevent soil blowing. Each year, seed grain fields are rotated with summerfallow. Grass seed crops are left down about four years, then these too, are rotated with brome-alfalfa land. Every once in awhile, grain and grass fields are also rotated. But each new seed crop is sown on summerfallow to keep weed growth at a minimum.

Food producers, no less than manufacturers, have to plan all phases of production. ✓

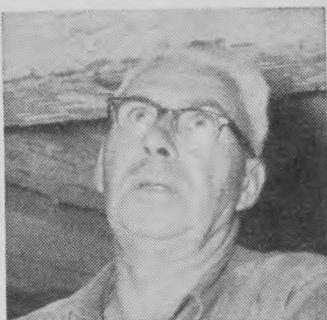
# Turbulent times for APPLEMEN

*Orchards get bigger, but the growers' bargaining power in the market doesn't*

by DON BARON

Field Editor

Tom Cleaver sold his cows when fruit growing demanded all his time. He now has 100 acres in apple production.



[Guide photos  
It takes 14 sprays during the season to produce these quality apples. Jim Cleaver thinks airplane spraying may cut the costs.



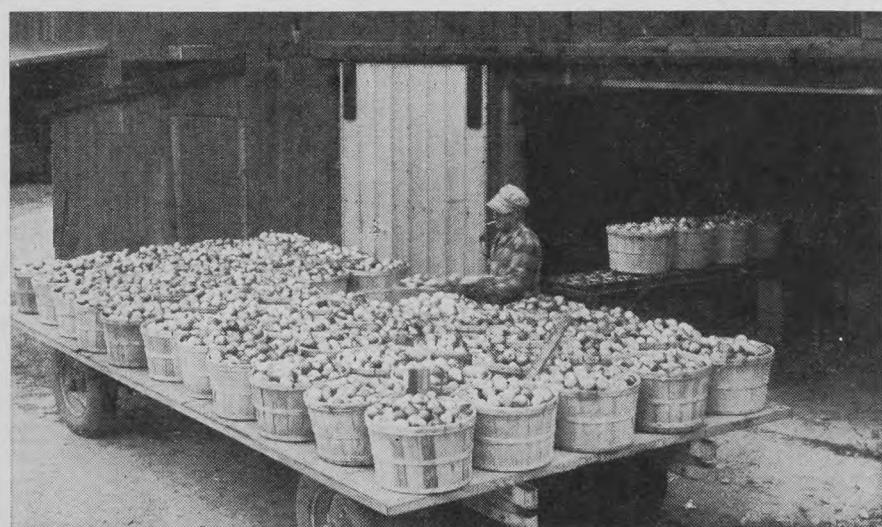
This 35-acre orchard was planted in 40-foot rows, and then interplanted with semi-dwarfs when rising taxes forced Cleaver to look for new income.



Expenses are high, because as many as 35 people are required at harvest.



Female workers prove very adept at grading in the Cleaver operation.



There is no profit in storing low-grade fruit. Cleaver has apples graded as they come from the orchard. Only quality fruit go to the co-operative.

**A**N industry in ferment—that's apple growing. Few farm enterprises can be so rewarding or so risky; have undergone such far-reaching changes, yet seem to have so many yet-undetermined changes to make.

A measure of the industry can be seen in Norfolk County, Ont. And one of the best-informed observers is Bruce Wallace, manager of the Norfolk Fruit Growers Association, a half-century-old co-operative.

The co-operative has been a pillar of strength to growers. Members like Tom Cleaver, one of the district's biggest growers, are emphatic on that. The co-op has been expanded until now it has a storage capacity for 300,000 bushels of apples, including the new, 60,000-bushel, controlled-atmosphere storage building. It has enabled members to stay off the fall market, when prices are usually lowest, and deliver their apples to the cold storage instead. The apples are graded there, put into storage and sold throughout the season. Prices are pooled, so members are protected from short-term market breaks, assured of returns that reflect the entire season's apple market.

But despite this protection, the cost-price squeeze has had a dramatic impact on growers over the years. The squeeze has virtually wiped out the small grower. In 1932, the co-op had 225 grower members. Today, there are only 75. Of these 75, 25 of the biggest grow 80 per cent of the apples.

Wallace explains the situation this way: "It takes a big acreage, and it takes high caliber management to grow apples today. Some of our growers are doing a fantastic job. They must be getting double the yields of former years, because prices aren't much higher than they were in the 1930's, yet costs are twice as high."

**T**HE picture in Norfolk County is one of big and efficient growers, joined together in a co-operative selling program. It's a picture of apparent strength. But, according to Wallace and Cleaver, and others who are involved, this is a deceptive picture. Despite this local unity, there is little order in the apple market. The growers have failed to exert any noticeable control over the conditions under which their apples are priced and sold. The result has been low prices, with the ensuing disaster for small growers, and bare survival for the larger ones.

Looming on the horizon is another problem. Like most cash croppers, applemen are always optimists. Some of them have made big new plantings in recent years. Predicts Wallace, "In the next half dozen years, there could be a 30 per cent gain in apple production here."

A lot of things can happen during the decade when a new tree grows to bearing age, he admits. A couple of years of disastrous prices could cause growers to abandon old trees. But if prices permit, these orchards will stay in production, threatening price trouble for later.

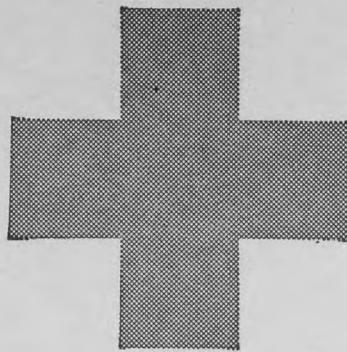
It will take a lot of salesmanship to sell the increasing apple crop.

The apple marketing situation seems to boil down to an old cry, and co-op manager Wallace echoes it this way: "If we could control the quality of all apples going to market, and if we could advertise effectively, we could increase apple sales by 50 per cent. If some wise dictator controlled the marketing of apples, he could boost returns to every grower by 25¢ a box."

**V**ETERAN grower Tom Cleaver's orchard illustrates how apple growing has changed. White-haired, but still youthful and vigorous, Tom recalls staying out of school each fall as a boy to help with the harvest. He remembers studying hard once the crop was in to catch up on the work he missed. He has kept himself busy ever since. He was an early member and president of the apple co-op. Today, he is a member of the Board of Education in his municipality.

He had dairy cattle as well as apple trees at the start of his farming career. But he sold the cows and has been expanding the orchard ever since. He will have over 100 acres of orchard in bearing in just a few years.

In looking back over the years, Tom recalls they have been ones of turmoil and change. Apple growing can look attractive. If you hit it lucky, and get a



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plantation like his 8-acre stand of Red Delicious, the crop can be better than tobacco. But year in and year out, it's a different story. Even on his size of orchard, costs eat up income. His average cost comes to about a dollar a bushel. This includes the price of containers, the cost of fertilizing, of pruning, of spraying, of picking the fruit, and of paying depreciation charges and taxes. It includes the cost of pulling out old trees or obsolete varieties, of waiting for new trees to come into bearing. When returns average only about \$1.15 to \$1.20 per bushel, it's no wonder that growers like Tom Cleaver are searching hard for ways to improve their lot, while small growers are living off depreciation, and gradually being squeezed out of the business.

**T**HE challenge, as applemen like Cleaver and Wallace see it, is to get into the market in a bigger way—to gain some power there. How?

That's the job that he and other industry leaders are dealing with today.

One recent attempt to solve the problem involved setting up a committee of growers to consider establishing a marketing board. The committee concluded that growers generally are not yet in a mood to accept the discipline of boards. It is searching for other methods.

However, growers have taken one important step. A committee sits regularly during the winter, asses-

ses markets, issues a list of recommended prices. This has brought some stability to the market.

But it is only the first step.

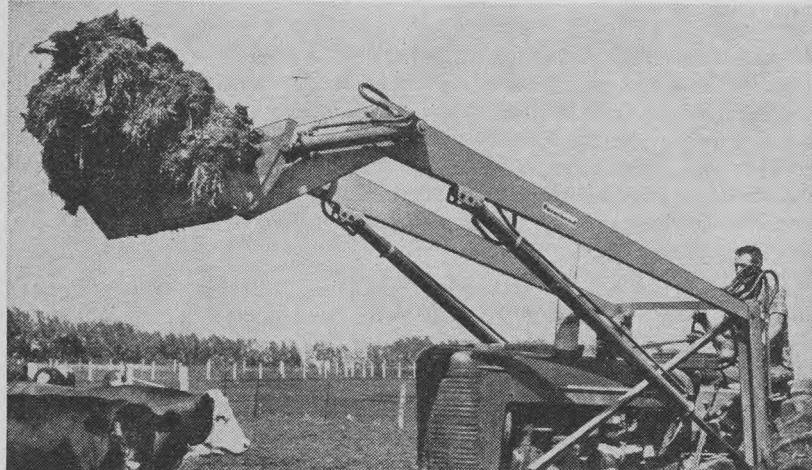
Their apple co-op provides Norfolk growers with one means of further action.

"A few years ago, we did prepack some apples," Cleaver recalls. "But we quit that when the trade seemed to be doing an effective job. Now, the situation has changed. There may be a lack of competition in the market. We have got to get into it again."

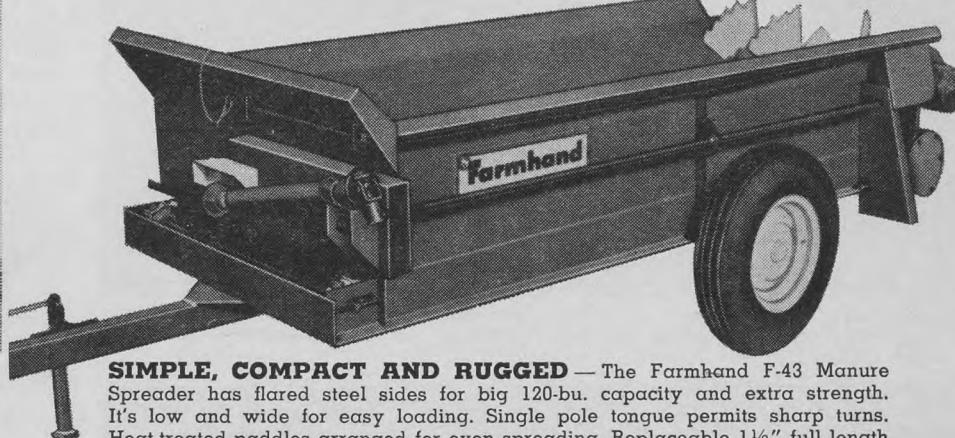
Co-op manager Wallace admits that some of the present troubles have been of the growers' own making. "Let's admit," he says, "that people in the trade did something that we overlooked over the years. They provided apples to their customers the year round. We were content to sell our own apples, and then let our customers go and look elsewhere for their supplies when ours ran out."

As a result, growers now face the formidable job of getting into the market again. Wallace and Cleaver admit that it's a fiercely competitive market in a good many ways; that those who are there today will fight hard to maintain their positions. But in their view, there is no alternative but to move boldly. It doesn't sit lightly with them that growers should have such a big stake in the industry, yet so little say in the market place. V

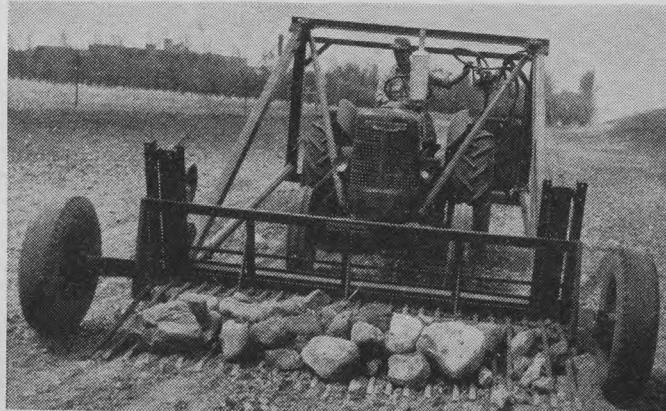
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# About Slatted Floors

*More pigs in the barn and less labor with this system*

THE advantages of raising pigs on slatted floors are that bedding is practically eliminated, the pigs are cleaner and healthier, more of them can be raised in the same space as was needed formerly, and labor is cut to a minimum.

However, there is a danger. While control of disease and parasites is simpler, a careless operator can run into serious trouble before he knows it. So little work is needed in the pens that there is a strong temptation to fill the feeders each day and hurry away to other duties. The herdsman must learn to detect the slightest symptom at the start and deal with it.

On the Humphrey farm at Aylmer, Ont., there are three slat systems in use, all installed last year. But we have had considerable experience because the method we use for breeding litters is a modification of one employed by us for 15 years.

The first step was to seek engineering advice, and then we converted a 100' by 30' barn to slats, each 42" long, over a gutter cleaner. Styrofoam insulation was laid under the concrete floor to maintain an even temperature.

The second barn, 60' by 40', has a wide alley running down the center. We built 7 pens on one side—4 of them 6' wide and the other 3 occupying 34'—leaving a 2' alley at one end and along the outside

wall. We slatted 5' at the inner end of each pen, and laid an insulated concrete floor at the end near the outside alley. The pens were raised to place a 4" auger under the slatted section, which would carry manure to a tank (11' across, 8' deep) under the pen at the end where the 2' alley was left.

COST, including auger, drive mechanism, tank, slats and concrete, was just under \$600, and it accommodates 175 pigs. The auger to pump out the tank cost \$118—it is a heavy, precision type with a stirring vane at the lower end.

Bacterial action in the tank converts the manure to a liquid, with a hard crust on top. The crust is left there to act as a seal against flies and disease. The tank holds 3 months' manure, and a second tank, 24' by 8' deep, will take manure for 4 months from 400 pigs weighing 40 to 200 lb.

To handle the liquid manure, we built a spreader with 5 sheets of 3/4" plywood and scrap of old equipment. A 5" machined, tapered plug and hole control the flow from the spreading tank, and manure can be spread as thinly as one load per acre. A cut-down combine straw spreader at the rear does a good job of spreading.

The brooding system combines a farrowing crate and brooding pen.

**by BOB HUMPHREY and SAM EICHER**

Aylmer, Ont., farmers



[Mudge photos]

Sow farrowed and raised 9 pigs in a 6 1/2' by 5 1/2' slatted pen, with a sloping floor on the Bob Humphrey farm. Piglets moved down to the heated areas.

THE system used by Sam Eicher requires no machinery in the barn except a feed cart and scraper. There is also a pump-out auger and tank spreader for liquid manure.

The bars were easily made, using 2 1/2" by 3" by 5' oak as the form, with 4 slats to each section. Slats were tapered, 1 1/4" on one side and 2 1/2" on the other, and 3" deep. The three middle bars in each form were 8" short to allow 4" of cement at each end. A piece was nailed on top to hold the form together. The spacing is optional, but Sam likes 1 1/4" spaces for pigs over 40 lb.

The best size of slot for baby pigs is 1", if they wander into the sow's part as they get older. They can't get caught by the legs, and, as small pigs take a little time to become used to slats, they go on them only to make manure.

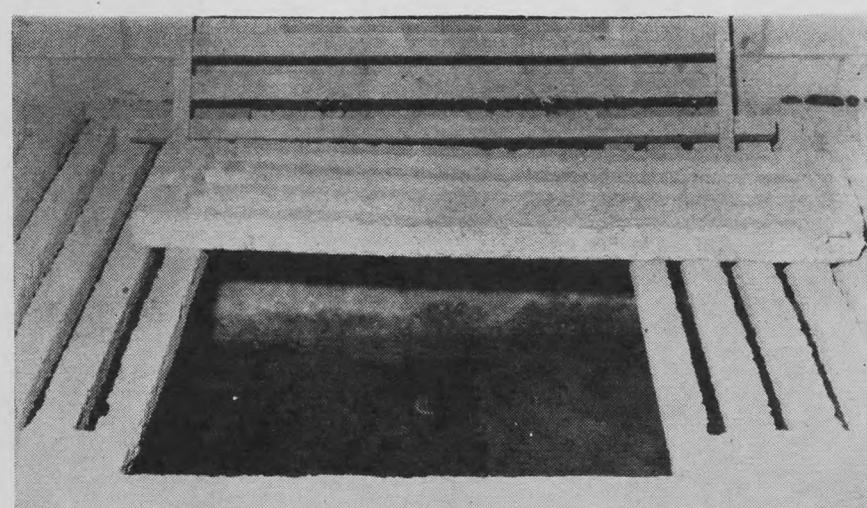
Only enough bedding is needed to satisfy the sow's instinct to make a bed for farrowing. After that, no bedding or cleaning is needed until she is out. For farrowing, we sometimes fill the lower slots in the sow's floor with wooden strips, and cover the 1/2" slots in the baby pigs' section with plywood, so there is no danger of catching their legs. The plywood is removed 24 hours after farrowing, when the pigs are stronger.

The cement was a dry mix with not more than 1/2" slump, and the form was set with the tapered cut down. Before cement was all tamped in, a 5/16" rod was placed in each slat and one across each end. About 1/2" of concrete was tamped over the rods. The form was then lifted off, ready for the next one. When the section was cured and turned over, the rods were near the bottom and reinforced the slats to hold 500 lb. It took 3 of us 40 minutes to make 10 complete sections of 4.

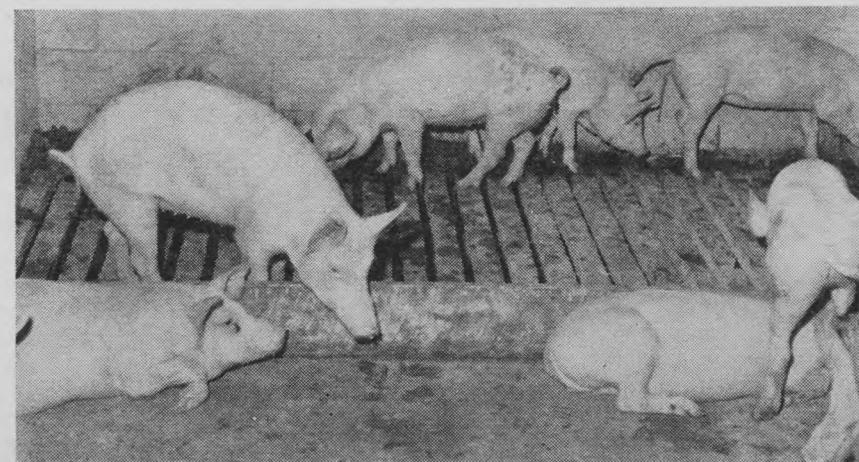
There is a ledge for slats to rest on over the pit, which is 3" deep and runs the full length of the barn. Two holes in the wall are for the auger when it is used for pumping manure out of the pit.

Most pigs go right onto the slats to manure and it drops through to the pit. The small amount left is scraped in twice a week, taking less than 10 minutes. There is rarely any manure on the floor where pigs lie down.

About double the number of pigs can be kept on the floor space that was used before. There is only enough bedding for comfort, and the labor is very light. ✓



Pit under the slats in Sam Eicher's barn. Up against wall is the wooden form used to make 4-slat concrete sections, which cost under \$1.50 each.



Pigs stay clean on concrete floor although without any bedding. An auger slants through hole in wall below the slats to clean out the manure pit.

# Six Generation Farm

by MRS. GEORGE WIGGINS



[Daybin photo]

Four generations of Wigginses. Seated, second from left is John H. with his sons, Ford, behind him, and George, seated, center. The author is next her husband. Their sons, standing at each end behind wives, are Scobie, left, and Jim, right. Daughters are June (standing center with husband Don McArthur), Anne.

*An Ontario farmer's wife has searched out and described the history of the Wiggins farm. It's a nostalgic story told in her own words. It will be meaningful to many farm people in this country*

IT is said that he who knows only his own generation, remains always a child. If this is true, it is not only interesting, but well worthwhile for all of us to look back, occasionally, at the story of our ancestors.

When we go to write such a history, we depend on the memory of the older generation. It is too bad that our ancestors left so little writing, but they were so busy hewing out homes, they had little time for it.

The following is a history of one old farm in Carleton County, eastern Ontario, on which six

ville, about 30 miles from Ottawa. It is too bad we haven't a diary of the trip. We who skim over the roads today in our luxury cars can scarcely visualize the hardship such a trip must have been.

It was in 1806, 10 years after leaving Ireland, that great grandfather Wiggins got the deed for his property. The parchment on which it is written is yellowed with age, and the writing is faded, but that deed is still in our hands today. It shows that the 200 acres involved was first granted by King George III to a daughter of a United Empire Loyalist, in 1803. The property was purchased by Robert Wiggins in 1806. The land is in the district then called, John's Town, in the Province of Upper Canada.

THESE pioneers built a log house and a stable on the banks of the Rideau, and undoubtedly spent many years clearing the land, and working in the "shanty" or lumbering camp. There was a wonderful stand of tamarack trees 7 miles from the farm, and these were cut off and floated down the river.

The site of the old farm buildings has almost disappeared, but even yet, the plow share occasionally turns up a stone out of the foundation, and just a few years ago, an oxen shoe was turned up. Needless to say, the younger generation wondered what it was.

Looking back, one wonders how the surveyors who marked out that land, did it so well. They worked through dense forest, yet they made so few mistakes. When the main road was surveyed through the district, our great grandfather moved from the river front, to the edge of it, and built his new home there.

Two sons and three daughters were born to this family. When the two sons, Robert and Thomas, were grown, the farm was divided between them. It was Robert who was our grandfather.

But the life of Thomas was an interesting one. His wife was a small woman. She never weighed over a hundred pounds. Yet she had a family of 11 children. We often wonder how a mother could clothe and feed such a family. I heard one of the sons say he wore one pair of wool socks all winter; that he never owned a white shirt. But to the credit of this family, they all made good and held many worthwhile positions in all parts of Canada.

Thomas' farm was eventually sold back to

Robert. A lilac bush is all that's left to mark the home where his family was raised. Planted by a pioneer mother, it's a bit of color that marks her memory.

After taking over Thomas' farm, Robert Wiggins decided to build a new home. This was in 1868. It is a good thing to plan and build a new home. He built the walls of that house four bricks thick (he was just a few doors from a brick yard), and used beams heavy enough to hold up a barn. Both these features provided some nice problems for electricians who wired this house a few years ago.

Life was a vastly different thing in those early days, to what we know now. Older men tell stories of how they cut trees in the winter, and, in the spring loaded the boats and scows with logs and railroad ties and traverses, or floated them down the Rideau River, to Bye-Town (now the nation's capital), the little lumbering village of those early days.

The river was the communication with the outside world then. Our father remembers when Ottawa was just one street—a boardwalk. Roads were bad. It took a good team of horses to draw a load.

As farms sprung into being, more goods were transported, and boats plied between Bye-Town and Kingston. When cheese factories were started, the cheese was drawn to the local wharfs, and it and other freight was loaded and unloaded there. When our barn was built, the galvanized roof was shipped by boat. On that boat, the roofing was piled close to bags of salt, which were coming to the cheese factory. Grandfather had to discard pieces which had been ruined by the salt.

THE women had the most privations. Our great grandmother tells how, when her husband was in the shanty, a bear would lie at her door, and how, in fear, she would wait until he departed.

In the absence of doctors, it was our great grandmother who brought most of the babies into the world in that community. She was called on in cases of sickness too. I have heard much about two of her remedies. When a baby or child was croupy, she cooked sliced onions in a pan, put them in a stocking, and placed them on the child's feet. It worked, too! The other remedy was for sores that threatened to turn to blood poisoning. There was no penicillin in those days.



Mrs. Wiggins and her husband George look at the original deed to their property issued in 1803.

generations of the same family have lived, and still live; where the family name is still intact.

Four brothers, with the surname Wiggins, set out by ship in 1795 from Ireland to Halifax. One of them was our great, great grandfather, Robert Wiggins. As the shores of Ireland faded from view, he saw a girl weeping with loneliness. To cheer her, he said, "Well, there is my girl." She resented his familiarity, and was so angry that she refused to speak to him. But when they were almost to America, she became very ill. Great grandfather shared his food, and nursed her back to health. When they disembarked, they were married.

At this point, the four brothers separated, and Robert Wiggins never heard from any of the others again.

During the next few years, he and his bride somehow made their way from Halifax to the place where they settled on the banks of the Rideau River, near the present town of Kempt-

She would put sheep's wool on live coals, and have the affected part held in the smoke.

Men worked long hours. Our grandfather often walked long distances to Council meetings and other events. In hauling logs from the stand of tamaracks that he cut, he had to drive 7 miles. He would be hot and perspiring when he got on his load for the drive home. The perspiration would freeze. He often had to sit by the stove waiting for his fur cap to thaw out, so he could get it off his head.

Before going to bed, he would eat a slice of fat salt pork, and drink a cup of thick cream. He used up the calories through hard work, and lived to be over 80.

OUR grandfather had one son, John. It is told of him that one of the neighbors was visiting his father when the boy, a lad of 10, ran to the gate to open it to let his neighbor through.

The neighbor said, "Thanks lad. When you need a wife, come up. I have a girl for you." As the years rolled along, that is exactly what happened.

This was a very happy marriage. John Wiggins, over 80, is in good health today, although the farm has passed along to two succeeding generations. One of his sons, George (my husband) and our two boys, Jim and Scobie, now are farming in partnership. As well, our five grandchildren (John's great grandchildren) are being raised on the farm as the sixth generation of Wiggins to be here.

John's other son, Ford, chose college rather than the farm, and had a very successful career.

It was in John Wiggins' time that the purebred herd of Dual-Purpose Shorthorns was established, and it has been developed over the years to a place of prominence in the country. Animals from it have won many honors at major livestock

shows, and have been sold into herds in many provinces across the country.

The farm has been expanded now to 500 acres. Two houses have been added, so that each family has independent living quarters, and each son has a son now to carry on the family name.

Perhaps our pioneer fathers worked hard, but today, our own sons are faced with problems just as formidable. They face the farm cost-price squeeze. Machinery must be bought and paid for, and taxes met. I don't believe the pioneers worked any harder than our sons do today.

I am sure there is many an easier life than farming.

It is said that man is like a plant. He should have roots; no one should cut himself off from his birthplace. Any farm, six generations old, is a heritage, rich in memories, and worthy of loyalty and a great love. V



A view of the Cushing homestead taken in 1911. The stacks represent Mr. Cushing's first grain crop. They partly hide his sod barn. Newly turned prairie sod, a granary and shack complete the setting.

## Homestead Memories

*A man who got his start in life in Nova Scotia tells the younger generations what it was like to pioneer in the Prairies*

### Part I

IN October 1909, I built my homestead shack on the N.W. ¼ of Sec. 36—Twp. 17—Rg. 19. This was the first sign of settlement in what is known today as the Roseray District. At that time my nearest neighbor was the R. R. Pearce family, 6 miles northwest, and my nearest post office was Gull Lake, 30 miles distant.

I came to Gull Lake by train, bought enough lumber and nails to build a 12' x 14' shack, and enough grub to last all winter, or so I thought (but it was really all gone in 2 weeks). I got a stove and the necessary equipment to get along with, hired a man with a team, loaded up the supplies and started out to find the homestead.

We found the S.W. corner of my land on a Sunday afternoon. I don't remember the date but know it was in October. I will never forget the completely lost feeling I had as I stood there alongside all my worldly possessions on the bald-headed prairie and watched that team disappear through the hills. I was 20 years old, a green kid from the East, in the wilds of Saskatchewan and very much alone.

### HOW IT ALL STARTED

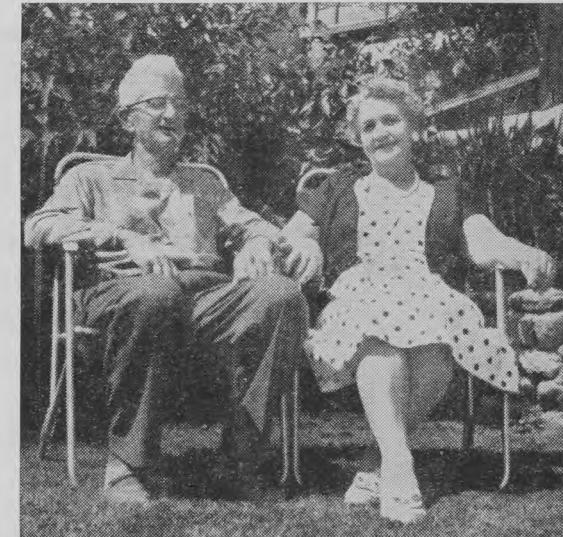
Why was I alone here on the prairie? As I sit here now and look back over the years that have passed, much too quickly, it seems remarkable how small an incident it takes to completely

by Z. F. CUSHING

change our entire lives. I was raised in little, old Nova Scotia, way down by the sea. When I was old enough to shift for myself, I went to Boston and got a job, as most young folks in Nova Scotia did at that time.

In the summer of 1908 I went home on vacation. At that time it was customary for the young folks to gather at some home after church for a sing-song. That particular Sunday evening, we young lads started to dare one another to go West on the harvest train which was leaving the following Tuesday morning. The result was that a friend of mine, Clarence Delong, and myself were aboard that train. Mother started me out with enough grub to last a week and a roll of blankets. My ticket from home to Moose Jaw cost \$11.00, and I can very truthfully say that was the roughest train trip I have ever taken or ever expect to take.

After 6 days of travel, we landed in Moose Jaw, where we heard of a demand for harvest help in Weyburn. Since our tickets allowed us to go to any point east of Moose Jaw without extra charge, we went to Weyburn and got work through harvest and threshing for \$2.50 per day, which was considered good wages at that time. The day started before daylight and ended after dark. I didn't think much of it and had no notion of staying, but somehow when my ticket ran out



Mr. and Mrs. Cushing today. They married in '13. Courting was done with an ox-drawn stone boat.

I was still working and, of course, before spring I had the homestead bug.

My first homestead was the N. ½ of Sec. 34—Twp. 7—Rg. 10. This land is located a few miles south of where the town of Aneroid is today. I filed on that land blind, and if I had stayed blind I might have kept it. But it was no good. I abandoned it and filed in the Roseray District.

### FIRST NIGHT

So there I was on my second claim, with all my worldly possessions and feeling a bit sorry for myself. I decided the first thing to do was to get something to eat. Then, for the first time, I realized I had no water. What was I to do? I could see the banks of Snake Hole Lake about a mile north. As it is natural to connect a lake with water, I took a pail and started out. When I reached the lake I found water alright, but it

(Please turn to page 22)

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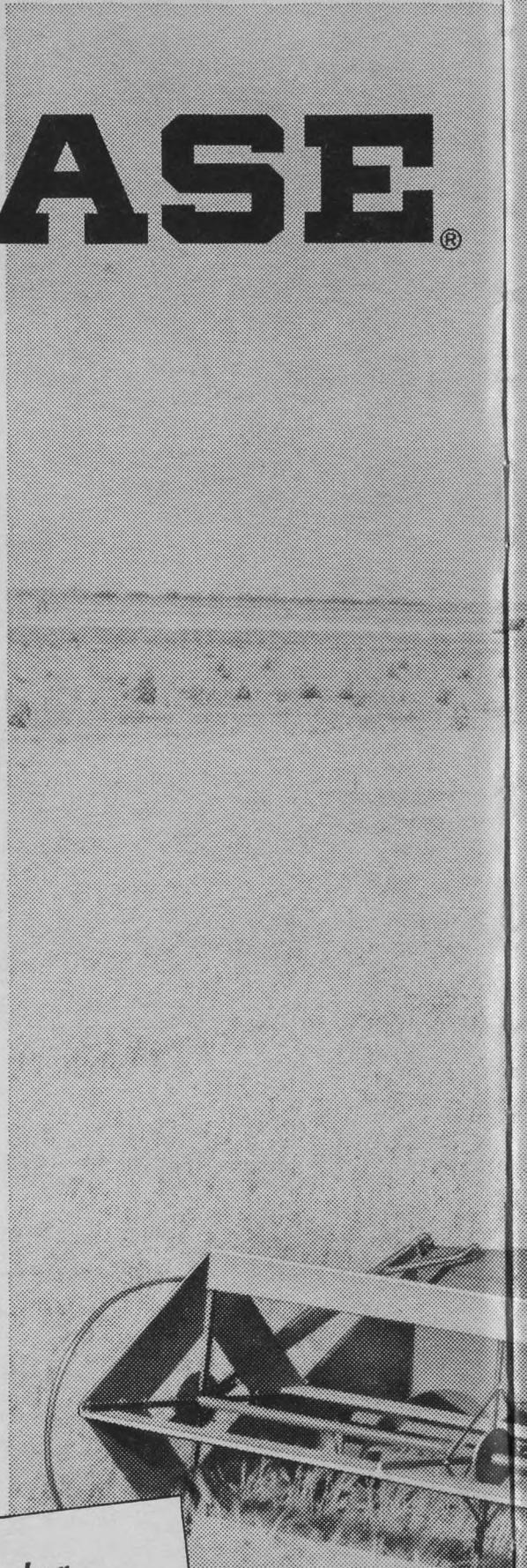
**NEW VISIBILITY**—you literally can see *everything* from the seat—header, cutter bar, grain bin level, even the straw spreader action. Seat is on left for safer, faster, easier road transport.

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On many other counts, the Ten-Ten offers you equally important advantages. You'll find them listed on the opposite page.



*There's another great new combine at your Case Dealer...  
the 10, 13 or 14-foot Model 700*

Smaller only in capacity than the big 1010, the new Model 700 has 40-inch-wide threshing-separating-cleaning capacity... yet the 10-foot model sells for up to \$1000 less than the 30-inch machines. Big 4-walker separation, 55-bushel tank and 70 hp, 6-cylinder engine.

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# TEN-TEN

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**EXTRA-HEAVY CYLINDER**—heaviest of all in proportion to its 42" width, the Case spike or rub bar cylinder acts like a big flywheel to maintain constant threshing speed even through heavy slug loads.

**5754 SQUARE INCHES OF SEPARATION AREA**—capacity-matched to the big 42-inch wide cylinder.

The Ten-Ten's 84" tread is perfect for row crops . . . or loading on an 8-foot truck bed

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# CASE



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## HOMESTEADING MEMORIES

was alkali, not a bit of use. I decided that the water must be coming from some place, so I started to cruise around through the hills and coulees, and sure enough I found a spring of real good water. I filled my pail and started for home, but—where was it? I had wandered through the hills and coulees until I had lost all sense of direction. Luck was with me. I arrived home just as it was getting dark. I cooked some supper, rolled up in my blankets and went to sleep.

When I woke the next morning, it was raining and cold as October has a habit of being. I was quite comfortable under the blankets, but there didn't seem to be much future in that. I finally decided that I had better get up and get going. I had a home to build and there was no one but myself to do it.

What a mess I found. Everything was soaked and there was no place to dry anything. If I could have been spirited back to civilization about that time, I think somebody else could have had the homestead with my blessing. I did the only thing I could think of—I started to dig—and by night I had a hole big enough to get all my stuff into it. I set up my stove and covered the hole with lumber. There wasn't much room in that hole, but I kept quite comfortable. It had stopped raining, and I felt that I had things pretty well under control.

The next morning I started to build my home, and the hole which I had been living in, I used for a cellar. I worked at that shack for about 2 weeks. The only living thing I saw during that time was a gopher, the most appreciated friend I have ever had. He was a cocky little devil and I came to think a lot of him. It is quite likely that in the years ahead, I poisoned and murdered in various ways, hundreds of his offspring. But if anyone had tried

to harm that gopher at that time, he would have had me to deal with.

### FINDING FRIENDS

After completing my shack, the question arose: "What was I to do all winter?" The more I looked at it, the less attractive it seemed. My grub and fuel were gone. My nearest neighbor was 6 miles, and the nearest source of fuel supply was 20 miles away. I had no means of transportation; and I knew that my gopher friend would soon hibernate and I would have no company.

I knew that two friends of mine from the East, Mert and Frank Freeman, had moved in on Sec. 9 and 16 of Twp. 20-Rg. 20, about a month before I had come in. This location is about 3 miles south of where Abbey stands today. I decided it was time I paid them a visit.

I started out early one morning to find them. I figured that it would be about 20 miles northwest. I came to a shack just before dark, which I thought should be the place, but there was nobody home. I went into the shack and rummaged around until I satisfied myself that it was the right place. Then I built a fire and started to get supper ready. Shortly after dark, I heard a team pull up out front and there they were, with a team of oxen and two barrels of water. They had been to Miry Creek, 10 miles away, for their water supply.

They were pretty well established, having been in about 6 weeks. They had a shack, a sod barn, two oxen and a good stack of hay. They were only 12 miles from the sand hills, so fuel was no problem. We talked the situation over and decided that we had better batch together for the winter.

Since I had planned to get a team of oxen in the spring and start farming in a big way, they advised me to get my team that fall, as they had lots of stable room and hay. So I started out one morning for Gull Lake, 50 miles on foot, to find someone willing to part with a team of bulls. I reached my shack the first night and Gull Lake the next day. Five days after starting out, I arrived back with two of the biggest, driest and hungriest bulls I have ever seen.

### SNOW SAVED THE DAY

Next morning we loaded the water barrels on the wagon, hooked up two of the bulls and trailed the other two behind so that they could drink at the creek. We started out. I have always figured that when those darn bulls finished drinking that day, that Miry Creek was the nearest to being dry that it has ever been. We arrived back that night with our two barrels of precious water and, believe it or not, the bulls drank one barrel before we got them in the barn, and we knew that they would finish off the other one in the morning. They were so footsore that they could never have made another trip to the creek.

Things looked mighty bad, but luck was with us because that night it snowed.

All we needed now was a little organization and we would be sitting pretty. Frank was to do the cooking, Mert to act as chore boy and all I had to do was convert enough snow into water to satisfy those very dry bulls. Every time I see a sign today "DRINK CANADA DRY" it reminds me of those bulls, they really tried to do it. That was the most unsatisfactory winter's work I have ever done. I would work all day building up a water supply and those confounded animals would lick it up to the last drop, with not so much as a "thank you."

### HUNTING EXPEDITION

Between Christmas and New Year's, Frank and I decided to spend a few days in the sand hills to try and get some prairie chickens and, if lucky, an antelope. The first day we arrived there, pitched our tent and got established for living. About 10 o'clock the following morning, I took a gun and started out in search of prairie chicken for dinner. I was only gone about half an hour when one of our darn fool blizzards came up. I don't remember ever seeing a storm blow up as quickly as that one did. In a matter of minutes, I couldn't see 100 feet ahead. I knew that I had been traveling west and also that the storm was coming from the west, so I put the storm in my back and started back, hoping that I would be lucky enough to find the tent.

I carried on until I realized that I was leaving the sand hills, so I turned and faced the storm until I found a good thick clump of willows. I was still clutching the prairie chicken I had managed to get, and, together, we crawled into the bluff. Then I broke off some dry willows and piled them up. By dark I had quite a bit of firewood. Fortunately, I had matches. I got a good fire going and things looked fairly cheerful. My big fight was to keep awake.

I was getting pretty hungry too, and all I had to eat was one prairie chicken. About midnight, I couldn't stand it any longer. I peeled the feathers off the bird and held him over the fire until he was nicely smoked and roasted a little. If I'd just had a little salt, that bird would have tasted pretty good. As it was, I still appreciated him.

After midnight, sleep got to be a real problem. I had to keep moving most of the time. If I went to sleep I knew I was finished. About 3:00 a.m. it started to clear. By 6:00 o'clock I took my course by the moon and started east. I knew I would never find the tent and my best bet was to get out of the hills, hoping to find a homesteader's shack. By daylight I was pretty well out of the hills.

Away in the distance I saw a wee shack with smoke curling up from it. This looked pretty good to me. I reached the shack about 9:30 that morning to find two bachelors living there—the Grayson brothers. They are both gone now, but they lived in that same location until a few years ago. I can safely say that

they could boil the best beans I have ever tasted. They had about a gallon of them, and I sure cleaned them up fast—the first square meal I had had in over 24 hours.

I tried to explain to them where the tent was, but it was pretty hard to make much sense of it. However, they had been there quite a while and knew the hills pretty well. They had a team of horses, so we set out to look for the tent and were lucky enough to come across it about the middle of the afternoon. Frank had left, taking the bulls, but he had left lots of grub and blankets. I knew that both Frank and Mert would be worrying about me, but I just couldn't force myself to walk the 12 miles back to their shack without some sleep. So I cooked a good supper for myself, and rolled up in my blankets.

I had intended to rest only a few hours and then start for home when the moon was high. The result was that I slept around the clock and by the time I got breakfast, it was daylight when I started for home. Just as I was getting out of the hills, I met a crowd coming—a whole sleigh load of them. I didn't know there were that many people in the country. They were armed with all the equipment it would be possible to use in digging a man out of the snow—they even had a bottle of whiskey, though where they got that I never knew. When they found that I was safe and sound and in one piece, the only thing to do was turn around and go home. The hunting trip was a real failure. All we had to show for it were two frozen toes and one prairie chicken, which I had consumed for my New Year's Eve midnight supper.

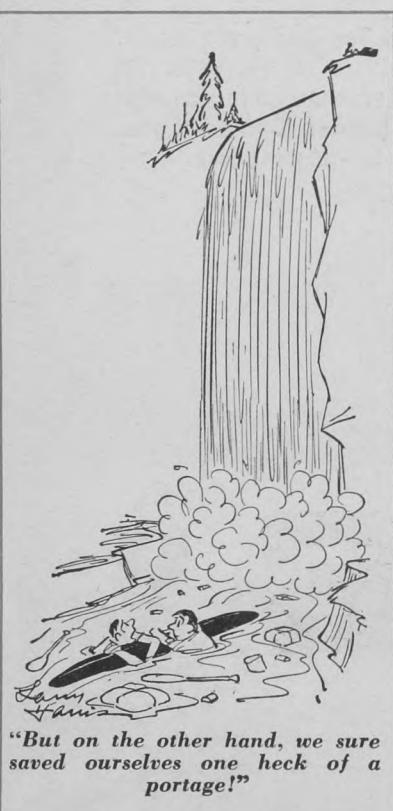
I believe there are only two men left in the Abbey District who were in that rescue party—Duncan Shaw and, I think, Bert Pierce. Mert Freeman, who is living in Victoria, B.C., was also in the group. Every New Year's Eve since that time, I always think of 1909, when I watched the old year out and the new year in from a clump of willows in the sand hills.

### SPRING FIRE

In 1910 we had a very early spring. It was the first of March when I moved back onto my own homestead. Mert and Frank went with me and helped me dig a well. I was lucky enough to find water at 28 feet, which solved my water problem. I started breaking in early March—a full-fledged farmer at last.

The first thing I did was to plow a fire guard around my east quarter. This was very important. One match was all that was needed and thousands of square miles of prairie would go up in smoke, and I was depending on that prairie grass for feed. In fact, that was all the feed I had. That bit of grass growing on the prairie was just as important to me as tractor fuel is to the farmer today.

One day, late in March, I saw black smoke in the west and I knew a fire was coming. It hit my fire guard about midnight and the guard held. It was a wonderful sight, a solid wall of fire as far as one could see. I have never heard where that



fire started, or where it stopped. The whole country was a black waste, all except the quarter section of grass that I had saved. Looking at that quarter section of grassland from a distance, it resembled the size of a postage stamp.

Well, to get back to farming, I started out with two very slow bulls and a 12-inch walking plow. If I could manage to make those bulls travel 12 miles a day, which I generally did, I would have nearly one and a half acres to my credit. I used to plod along behind the plow and look over that 320 acres, which I was supposed to own some day if I could stay with it. That was the biggest looking half section of land I ever saw. I used to wonder if I would ever manage to break it all. I did—and a lot more.

#### HARD WORK AND GOOD NEIGHBORS

My way of life was very simple. I started off on Sunday by baking a gallon of pork and beans and enough bread to last a week, this was a real start for the week. I could sweep the floor—if it needed it. Company never bothered me because I never had any. Week-days I was up and had the bulls going by 4:00 o'clock in the morning, unhooked at 9:00 a.m. and had lunch. Every second day I took two plow shares on my back and walked 12 miles to Baskerville's to have them sharpened. I'd be back home and have the bulls going from 4:00 p.m. until 9:00 o'clock. Then supper and off to bed. I did the same thing the next day and the next and the next, not very exciting, but I was getting the work done.

Sometime during 1910, Mr. Pearce started a blacksmith shop with Bert Martin in charge. This helped a lot, as I only had 6 miles to go then to get my shares sharpened. Mr. Pearce also had a store, which made it mighty handy to get groceries.

This Pearce family were English. They settled in the district in 1909 with their six sons. They were the most hospitable people I have ever known. They only stayed about 5 years, but during that time I will venture to say that they did more real good than any family that ever came there. If we bachelors landed in for our mail, or a few groceries, at meal time, we always had to stay and eat. Can you imagine how much that meant to us hungry kids that were living on beans and bread? I guess there was many a time that we planned things so we would be there at meal time. If we had no money to pay for our groceries, we got them anyway, and I fear some of them were never paid for.

Nearly 50 years have passed since the Pearce family lived among us, but I notice that whenever we old-timers start discussing the old days, the name Pearce generally enters the conversation.

The only member of the Pearce family left in the district is their daughter, Margaret Jacques. The Jacques' were my nearest neighbors from 1911 until I left the farm in 1929. Mrs. Jacques now resides in Cabri.

(To be continued)



# "They look alright—that's what fooled me!"

says Robert Atkins, R.R. 6, Belleville

Last year's spark plugs "that look alright" will cost you an average of 2 extra days plowing time this year! The facts are indisputable: even if you changed spark plugs last fall, there's a proven 90% certainty they've already been used too long ... (as proved by hundreds of tractor tests throughout Canada and the U.S.A.) and now have hidden misfiring you probably can't hear or feel! What happens? Those plugs that seem still good are quietly draining off vital amounts of your engine's pulling power and costing you valuable time and money.

Mr. Robert Atkins' case is exceptional; he was losing a staggering 12 h.p. on his tractor—as was proved to him at the Dynamometer Clinic at Alton-Hadley Massey-Ferguson Dealership in Belleville, Ontario. But, the average loss to "borderline" plugs is 2 full horsepower. And that is more than enough to drag out your plowing time by two extra days (if you work about 480 acres).

And it's more than enough to strap you with scores of unnecessary gear changes and harder pulling through tough spots.

Besides, as you push into the season with these same old plugs your losses will rise. The average "borderline" fuel loss adds up to a big 8%.

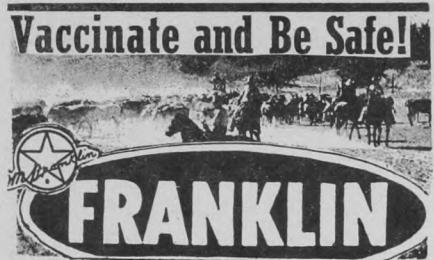
You can prevent these losses simply by having new Champion Spark Plugs installed in the Spring and Fall. Why Champion in particular? Because of their longer-lasting qualities. Because they're the first choice of tractor manufacturers! Install a new set of silvery-plated Champions now!



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TWEDDLE FARMS Fergus Ontario

## Pig Co-op Uses 400 Sows

Enterprise supplies 3,000 pigs to members, boosts production

WHEN it comes to promoting the swine industry, the Scotsburn Co-operative in Nova Scotia is doing more than standing back and exhorting its members to action. In the past 2 years, it has built up a swine farm where 400 sows and gilts were farrowed last fall, producing 3,000 or more pigs. Every pig will be sold as a weaner to co-op members. And once this big hatchery reaches the size planned for it, manager T. C. McConnell says 7,000 or 8,000 pigs a year will be produced by a herd numbering 500 sows.

"There won't be any trouble selling those weaners either," he adds. "A few of our farmers are now taking 100 pigs or more at a time, and the demand is growing faster than we can meet it."

The hatchery idea came to the co-op's directors 2 or 3 years ago, when it became apparent that local farmers would have to expand their farm programs and boost their incomes, if they were to remain on the land. With pork in short supply in the province, and with hogs being one enterprise that it was possible to set up on most farms without a lot of expense, the pig industry seemed to offer a natural solution.

Directors of the co-op decided that most local farmers would be more interested in feeding market hogs than in keeping sows and producing pigs. Since there was no readily available supply of weaners in the area, they agreed to start a hatchery.

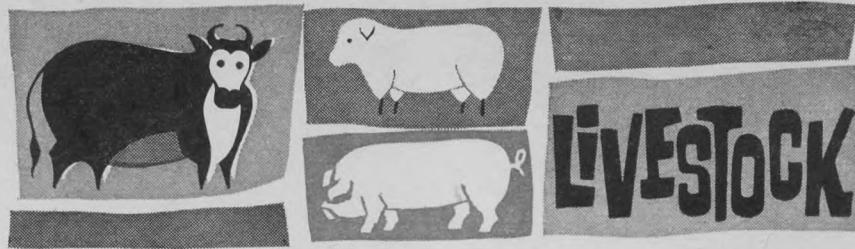
One of the principal expenses in the project was the farrowing barn. The main building, and the new extension, have 53 farrowing pens, 9 of which are fitted with farrowing crates. So far, the sows have farrowed just as well in the open pens as in the crates.

A separate building is provided for the boars. Three different breeds are involved (Yorkshire, Lacombe and Landrace) because crossbred weaners are being produced. The dry sows are kept in runs outside, with simple shelters which are adequate in winter and summer alike. —D.R.B. V

### Should You Feed Them Often?

CATTLE make better use of their feed if they are fed often, according to dairy scientists at the University of Wisconsin. They made tests with feeding frequencies of 2, 4, and 8 times per day, and checked the rumen contents and body wastes at intervals to see what was happening to the nutrients.

The probable benefit of frequent feeding was that it created more favorable conditions for the bacteria that aid digestion in the rumen. V



[Guide photo]  
The dry sows run outdoors both in winter and summer, with only a simple shelter provided in fields that extend back from the farrowing building.

## Final Results of "Red Meat" Investigation

LAST November, about 90 stockgrowers gathered at Western Feedlots Ltd., Strathmore, Alta., to hear the final results of the 1962 beef progeny test on calves and steers (see "Breeding for Red Meat" in the October 1962 issue), including their retail value. As a further evaluation, these groups were compared with the standard set by Performance Registry International for a Certified Meat Sire with the following results:

| Live Performance  | Standard                                | PROGENY GROUPS MEETING THE P.R.I. STANDARDS |           |          |                       |                |           |          |                      |
|---|---|---|-----------|----------|-----------------------|----------------|-----------|----------|----------------------|
|   |   | 5 Straight Herefords                        | Charolais | Holstein | 10 Straight Herefords | Aberdeen-Angus | Charolais | Holstein | Back-cross Herefords |
| Average Daily Gain to Weaning.  | 1.85 lb./day                            | None  | Yes       | Yes      | None                  | Yes            | Yes       | Yes      | Yes                  |
| Average Daily Gain on Feed.   | 2.50 lb./day.                           | 4   | Yes       | Yes      | None                  | No             | Yes       | No       | No                   |
| Lifetime Weight per day of age.   | 2.30 lb./day.                           | 4   | Yes       | Yes      | None                  | No             | Yes       | No       | No                   |
| Carcass Measurement   | Standard                                |   |           |          |                       |                |           |          |                      |
|   |   | 5 Straight Herefords                        | Charolais | Holstein | 10 Straight Herefords | Aberdeen-Angus | Charolais | Holstein | Back-cross Herefords |
| Carcass Weight per Day of Age (dropped to 1.23 lb./day because above std. based on "fat in.") | 1.25 lb./day                            | 4   | Yes       | Yes      | None                  | No             | Yes       | Yes      | Yes                  |
| Loin Eye Area   | 2.0 sq. in./100 lb. warm carcass.       | None  | No        | Yes      | 4                     | Yes            | Yes       | Yes      | Yes                  |
| Fat Thickness   | Not over 0.13 in./100 lb. warm carcass. | 1   | Yes       | Yes      | 2                     | No             | Yes       | Yes      | Yes                  |
| Marbling  | USDA designation small.                 | 4   | Yes       | Yes      | 7                     | Yes            | Yes       | No       | No                   |

Commenting on these figures, Doug Baird, CDA production section chief, had this to say. "It is surprising to find that the Holstein crossbreds were the only 'Fed Calf' group, and the Charolais crossbreds were the only 'Finished Yearling' group to meet P.R.I. requirements on all counts."

What does all this mean to the producer? The comparison of the dollar value of the various progeny groups was made on the basis of the average Calgary price for the week ending May 26 for fed calves, and that of the week ending July 28 for finished yearlings:

| Sire   | No. Calves | Grades |     |      | Average Adjusted Slaughter Wt. | Average Live Value \$ | Average Dollar Value Over the Lowest \$ | Average Per Cent Value Over Lowest % |
|--------|------------|--------|-----|------|--------------------------------|-----------------------|---|--------------------------------------|
|        |            | Ch.    | Gd. | Std. |                                |                       |   |                                      |
| 103H   | 9          | 8      | 1   | —    | 854                            | 215.37                | Lowest                                  | Lowest                               |
| 104H   | 10         | 9      | 1   | —    | 979                            | 245.16                | 29.79                                   | 13.8                                 |
| 106H   | 10         | 10     | —   | —    | 992                            | 251.47                | 36.10                                   | 16.8                                 |
| 108H   | 5          | 5      | —   | —    | 1,017                          | 257.81                | 42.44                                   | 19.7                                 |
| 109H   | 8          | 8      | —   | —    | 961                            | 243.61                | 28.24                                   | 13.1                                 |
| Char.  | 7          | 3      | 2   | 2    | 1,083                          | 266.45                | 51.08                                   | 23.7                                 |
| Holst. | 10         | 8      | 2   | —    | 979                            | 246.08                | 30.71                                   | 14.3                                 |

(Please turn to page 26)



# NEW

# FLEXI TOOTH\*

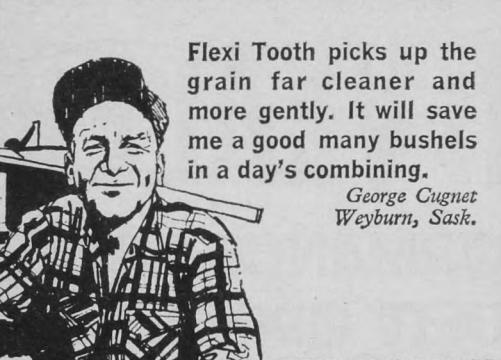
## HARVESTS MORE CROP • PICKS UP FEWER STONES

Field-tested last year on the prairies, this remarkable new, flexible harvesting tooth for combine and baler pick-ups has proven to be superior to conventional teeth. Flexi Tooth can be lowered closer to the ground. As a result Flexi Tooth harvests more crop per acre. It picks

up fewer stones—meaning less rejection at market—less damage to costly equipment. Mounted in rubber strips Flexi Tooth is quieter—minimizes dust. What's more, wild buckwheat is thrown off and doesn't "bind" as it does with conventional teeth.

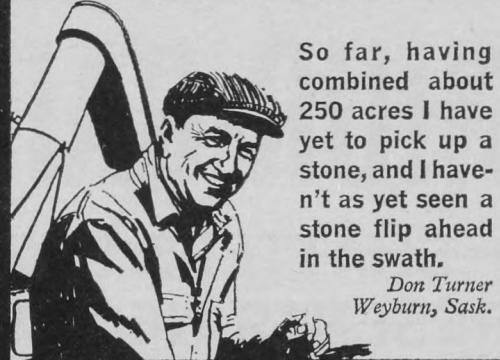
*SEE YOUR IMPERIAL ESSO AGENT TODAY AND ASK HIM ABOUT THE SPECIAL INTRODUCTORY OFFER!*

HERE ARE SOME COMMENTS MADE BY LEADING PRAIRIE FARMERS WHO USED FLEXI TOOTH



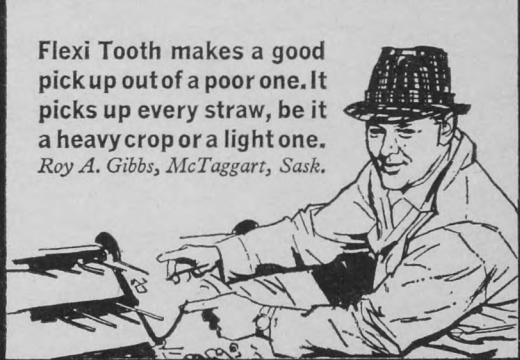
Flexi Tooth picks up the grain far cleaner and more gently. It will save me a good many bushels in a day's combining.

*George Cugnet  
Weyburn, Sask.*



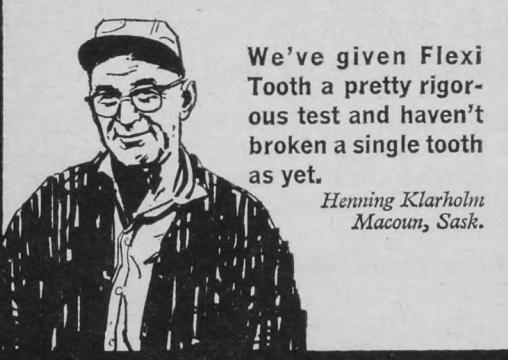
So far, having combined about 250 acres I have yet to pick up a stone, and I haven't as yet seen a stone flip ahead in the swath.

*Don Turner  
Weyburn, Sask.*



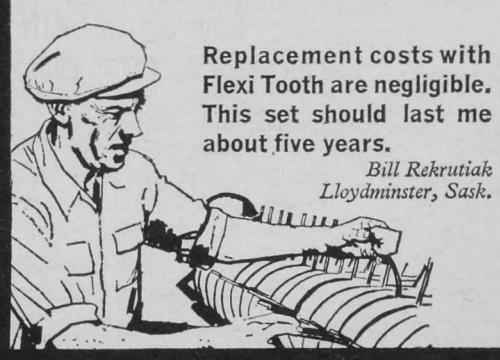
Flexi Tooth makes a good pickup out of a poor one. It picks up every straw, be it a heavy crop or a light one.

*Roy A. Gibbs, McTaggart, Sask.*



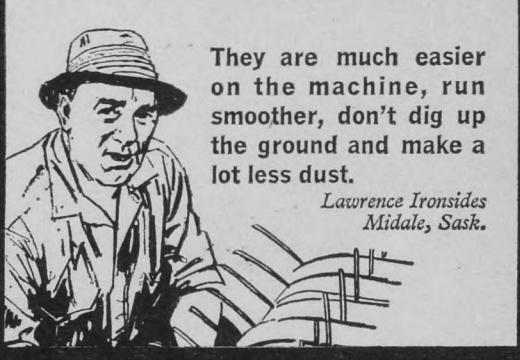
We've given Flexi Tooth a pretty rigorous test and haven't broken a single tooth as yet.

*Henning Klarholm  
Macoum, Sask.*



Replacement costs with Flexi Tooth are negligible. This set should last me about five years.

*Bill Rekrutiaik  
Lloydminster, Sask.*



They are much easier on the machine, run smoother, don't dig up the ground and make a lot less dust.

*Lawrence Ironsides  
Midale, Sask.*

## ESSO TRACTOR GASOLINE



the gasoline designed especially for tractors, operating under prairie conditions. Field-tested on thousands of prairie farms and proven to provide maximum power and efficiency at the lowest possible cost.

YOUR  AGENT IS RIGHT WITH THE TIMES

*\*Patent applied for*

WITH MORE FOR YOU...MORE PRODUCTS...MORE SERVICES...MORE VALUES

(Continued from page 24)

## Finished Yearlings—Adjusted to Common Age (460 Days)

| Sire   | No. Calves | Grades | Average Adjusted Slaughter Wt. | Average Live Value \$ | Average Dollar Value Over the Lowest \$ | Average Per Cent Value Over Lowest % |
|--------|------------|--------|--------------------------------|-----------------------|---|--------------------------------------|
|        | Ch.        | Gd.    | Std.                           |                       |   |                                      |
| 103H   | 9          | 8      | 1                              | 935                   | 241.13                                  | Lowest                               |
| 104H   | 13         | 12     | 1                              | 980                   | 252.21                                  | 11.08                                |
| 106H   | 18         | 18     | —                              | 972                   | 251.75                                  | 10.62                                |
| 107H   | 10         | 9      | 1                              | 984                   | 253.81                                  | 12.68                                |
| 108H   | 6          | 6      | —                              | 1,005                 | 260.30                                  | 19.17                                |
| 109H   | 9          | 9      | —                              | 1,005                 | 260.30                                  | 19.17                                |
| Char.  | 7          | 4      | 2                              | 1,106                 | 283.66                                  | 42.53                                |
| Holst. | 8          | 2      | 6                              | 1,012                 | 253.76                                  | 12.43                                |
| 110H*  | 10         | 8      | 2                              | 1,055                 | 271.02                                  | 29.89                                |
|        |            |        |                                |                       |   | 12.4                                 |

\* Hereford back-cross on Holstein-Hereford females.

Animals which have a high value to the producer generally bring the best returns to the retailer. This is shown by the following comparison of the retail profit of various sire groups of fed yearlings prepared by Eldon Myers, meat manager for Canada Safeway Stores, Calgary:

| SIRE               | Number of Calves | Average Cut-Out % | Rank on \$ Profit | Average % Profit Over Lowest \$ Profit |
|--------------------|------------------|-------------------|-------------------|--|
| 103H*              | 9                | 79.1              | 9                 | .42                                    |
| 104H*              | 12               | 79.5              | 5                 | 5.19                                   |
| 105H               | 7                | 78.5              | 6                 | 4.86                                   |
| 106H*              | 17               | 78.7              | 4                 | 5.36                                   |
| 107H*              | 10               | 78.3              | 8                 | 3.49                                   |
| 109H*              | 8                | 78.9              | 3                 | 5.44                                   |
| 110H (Hereford)    | 11               | 79.1              | 10                | Lowest                                 |
| Charolais*         | 6                | 78.2              | 1                 | 24.00                                  |
| Holstein*          | 7                | 78.1              | 7                 | 4.07                                   |
| 110H* <sup>1</sup> | 10               | 78.3              | 2                 | 11.83                                  |

1 Hereford back-cross on Holstein-Hereford females.

\* Bulls shown in comparative value of progeny groups to the producer.

"Remember, these are just the comparative retail values of sire groups, not of individual animals," Mr. Myers explained. "Our first animal gave us a 17 per cent retail cutout value (in Safeway terms this means they will receive 17 per cent more for the carcass than they paid for it. The company figures

it needs a 22 per cent value before a profit is made.) The highest cutout value obtained was 27 per cent. This was a 'blue' carcass (grade two). I think the grader even shut his eyes when he marked it 'blue.' We wouldn't have brought it into the store if it hadn't been a test animal. The trouble with this type of carcass is that you can't age the meat. It'll go bad on you before you can age it because it has little or no fat on it."

Contrary to popular opinion, the retail profit on meat comes from the front quarter. This is a result of the wide price spread between the front and hind quarters set by the packer.

"The public never looks at the price of chuck roasts or stew meats," said Myers. "They just look at the price of steaks. The fact is, we generally lose money on steaks. Stores catering to higher income groups make less money than those selling mostly to the lower income groups."

Those in the industry who think beef improvement work largely a waste of time will find plenty of food for thought in the pattern of results emerging from these tests.—C.V.F. ✓



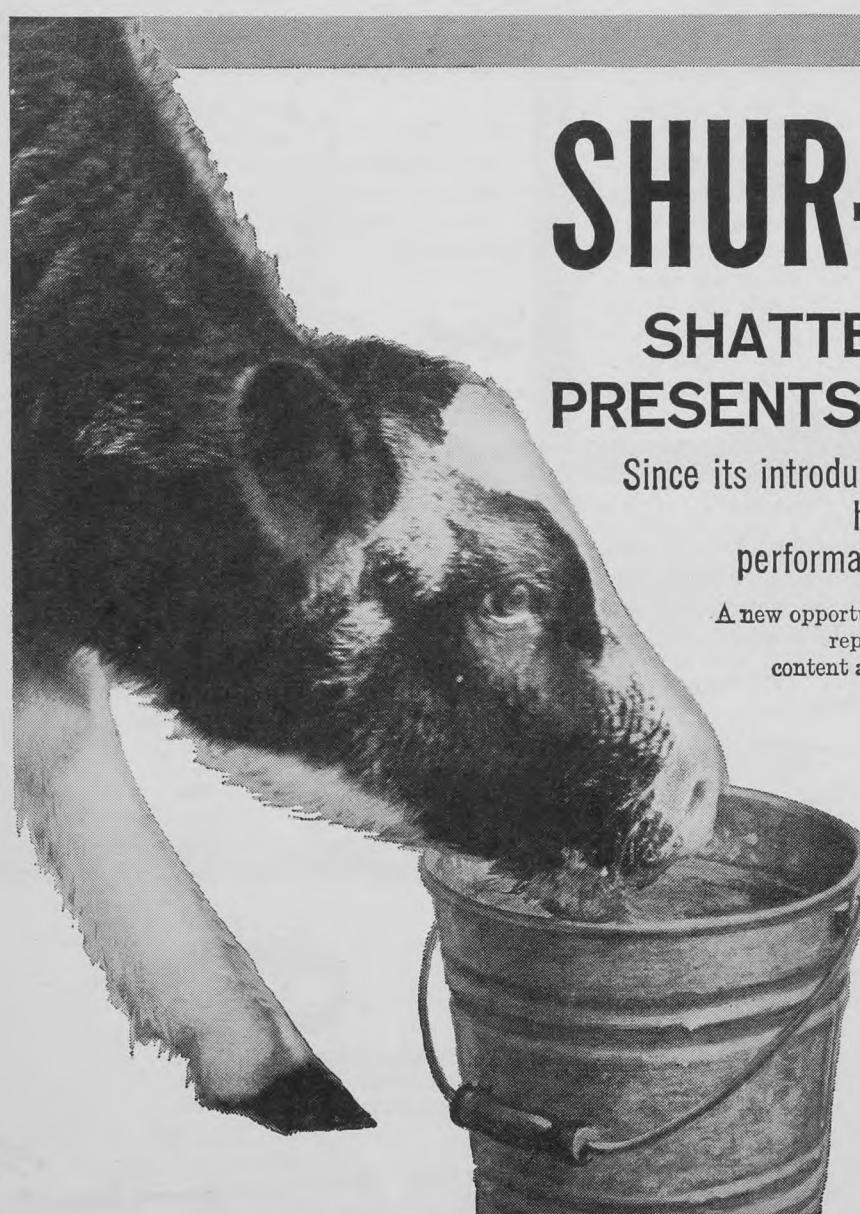
The 1962 test completed, calves for 1963 feeding test are tagged. Feeding enables researchers to obtain data on sires before next breeding season. [Guide photo]

### Lamb Losses Can Be Curbed

ONE cause of serious lamb losses, known as enterotoxemia, can develop into severe diarrhea and

general weakness, pneumonia and other complications, or lambs simply appear to die in their sleep.

The Alberta Veterinary Laboratory reports that, in the diagnoses made, enterotoxemia was caused by an infection called clostridium perfringens



# SHUR-GAIN VEALER... SHATTERS PERFORMANCE RECORDS, PRESENTS NEW PROFIT OPPORTUNITIES

Since its introduction last year, thousands of Canadian feeders have discovered how SHUR-GAIN VEALER shatters their previous veal production performances through low cost gains, better feed conversions.

A new opportunity for profit from veal calf production is presented because SHUR-GAIN VEALER replaces whole milk entirely as the sole ration. Improved utilization of the special high fat content and proven formulation, which includes antibiotics for the control of scours, enable any feeder to grow calves with the desired finish for good to choice grades.

■ Shur-Gain Vealer costs much less to feed than whole milk.

■ It gives a low, low feed conversion; a pound of gain per pound of Shur-Gain VEALER is normal.

■ Simple to mix, easy to feed—just follow the directions on the bag.

■ Calves weighing at least 80 lbs. at birth give best results, lighter calves require a longer feeding

period, but can be just as profitable.

■ For maximum gains, veal calves should be marketed at about 225 lbs. to 250 lbs. and fed for a period of 9-11 weeks, depending on the starting weight of the calf. Shur-Gain Vealer required... less than 200 lbs.

Get full details to-day, from your local Shur-Gain Feed Service Mill.

**SHUR-GAIN puts the GAIN in**  
**SHUR-GAIN FEED SERVICE MILLS**

type D. Extremely good control has been obtained from injecting pregnant ewes with a bacterin of this type.

Lambs from unvaccinated ewes, and a few from vaccinated ewes, which develop diarrhea a few days after birth, have responded quickly to 1 or 2 doses of antitoxin.

If lambs are sent to the veterinary laboratory for confirmation of enterotoxemia, they should arrive within 2 hours of death because the toxin is quickly destroyed in the intestines. ✓

## Deworming Is Important

SPRING and fall are the best times of year to "mend sheep health fences," according to A. J. Charnetski, livestock supervisor with the Alberta Department of Agriculture. He emphasizes the importance of deworming when the flock is moved from pasture to stubble fields or winter quarters and when they are put out on pastures again in the spring.

Mr. Charnetski recommends deworming sheep with fine grain phenothiazine at the level prescribed on the package. Weather permitting, the liquid form is usually the easier to handle if a regular drenching pistol is used. Lambs should be treated at the same time as the ewes and the entire flock confined to neutral ground or retained in the old pasture for 24 hours to prevent spreading worms to new pasture.

If tape-worms are suspected, a

special phenothiazine-lead arsenate mix should be used. This is an American product and is only available through a veterinarian. Since there is a narrow margin of toxicity it should only be administered by a veterinarian.

A cheap drench, which is very effective against tape and other worms can be made up by mixing crystals of copper-sulphate, 40 per cent nicotine sulphate and soft water. Exact directions for preparing the solution are contained in the publication "Sheep Diseases in Canada," prepared by the federal government, and "Sheep Production in Alberta," put out by the University of Alberta. Both pamphlets can be obtained from district agriculturists or from the Extension Service of the Alberta Department of Agriculture, Edmonton. ✓

## Better to Grind Feed Grain for Cattle

IT is better to feed cattle coarsely ground grain than to feed them whole grain, says Dr. C. B. Bailey of the Lethbridge Research Station, Alta.

Here is the reason. Feed eaten by cattle goes directly to the rumen, or first stomach. Here it is attacked by millions of bacteria and broken down so that it can be used by the animal. The rate of digestion of any feed in the rumen depends on the size of particles and the speed with which rumen fluid can penetrate them. When feed is ground, the relatively impervious grain hulls

are partially separated from the kernel, and the kernel itself broken into small fragments. When eaten by cattle, these fragments are incorporated into the rumen contents more readily than whole grains, and become available to rumen bacteria much sooner.—C.V.F. ✓

## Tube Dehorner



[Guide photo]

LES BOULTON, Okotoks, Alta., dehorns a young calf with a simple tube dehorner used on calves up to 4 months of age. Helping him are his son and a young neighbor. The cutting edge of the instrument is placed straight down over the horn, weight is applied and the tube is twisted first one way then the other until it cuts to the skull bone. The dehorner is then turned at a 45-degree angle and the cutting edge shoved under so that it scoops

out the horn button. Finally, a disinfectant is applied to the hole. ✓

## Hogmen Could Learn from Beef Industry

HOGMEN could well take a lead from beefmen, says A. L. Currie, Livestock Specialist of the Canada Dept. of Agriculture, Kitchener.

A few years ago only 6 per cent of beef carcasses graded "Choice," now that figure has risen to over 35 per cent, Currie told a conference of swinemen at Ridgeway, Ont.

Beefmen have given us younger, more tender, juicier beef simply because the customer wanted it, he said, and not because of a subsidy or other government buying policy. They stood on their own feet and brought their industry along, making beef the number one meat on the Canadian dinner table.

Meanwhile, because of overfat hogs, pork popularity has not kept pace. Overfinish is plaguing the industry, and hits the grading results of hogs. Ninety-five per cent of the hogs that fit within the weight range for A's but which are graded down, lost out because of overfinish, he said.

The thing that saves the Canadian swine industry, in Mr. Currie's view, is processing and packaging. Specialty products made from pork, have become popular, enabling the Canadian processor to stand second to none in putting up pork products in a way in which the housewife will buy them. ✓

# \$25 PROFIT PER CALF —9-11 WEEKS FEEDING with SHUR-GAIN VEALER

Take a look at some of the results obtained with Shur-Gain Vealer. The first four from the Shur-Gain Demonstration Farm, the others—random results from Canadian feeders.

| No. of Calves | Average Cost of Calves | Vealer Consumed | Average Weight Gained | Feed Conversion | Average Age to Market | Veal Market Price | Profit Over Feed and Calf |
|---------------|------------------------|-----------------|-----------------------|-----------------|-----------------------|-------------------|---------------------------|
| 1             | \$25.00                | 185 lbs.        | 144 lbs.              | 1.28            | 9 wks.                | @30.00¢—\$74.40   | \$22.80                   |
| 1             | 25.00                  | 184 lbs.        | 188 lbs.              | .98             | 12 wks.               | @29.50¢— 84.08    | 29.64                     |
| 1             | 25.00                  | 182 lbs.        | 198 lbs.              | .92             | 13 wks.               | @29.50¢— 86.14    | 32.02                     |
| 1             | 25.00                  | 234 lbs.        | 222 lbs.              | 1.06            | 16 wks.               | @30.00¢— 90.00    | 27.56                     |
| 5             | 25.00                  | 208 lbs.        | 148 lbs.              | 1.40            | 9 wks.                | @32.50¢— 81.03    | 28.45                     |
| 3             | 18.00                  | 250 lbs.        | 203 lbs.              | 1.23            | 11 wks.               | @29.50¢— 81.60    | 23.60                     |
| 4             | 18.00                  | 175 lbs.        | 190 lbs.              | .92             | 14 wks.               | @25.00¢— 70.01    | 24.01                     |
| 1             | 25.00                  | 210 lbs.        | 217 lbs.              | .97             | 11 wks.               | @34.75¢—102.51    | 44.08                     |

The average profit over feed and calf costs on these 17 was well over \$25.00 per calf, in spite of some of them being marketed at the lowest markets in 1962.

Shur-Gain Vealer can make money for you—get a bag to-day ready to start off your next calf and prove it for yourself by feeding right through to market weight!

**REMEMBER**—For Veal Calves use SHUR-GAIN VEALER which includes a special high fat level but—for replacement calves use specially formulated SHUR-GAIN MILK REPLACER.



## CALF FEEDING

proven for Canadian conditions

your balanced feeding headquarters IN CONTRACT WITH CANADA PACKERS

## Healing Substance In Preparation H Shrinks Piles

Exclusive Healing Substance Proven To Shrink  
Hemorrhoids And Repair Damaged Tissue.

A renowned research institute has found a unique healing substance with the ability to shrink hemorrhoids painlessly. It relieves itching and discomfort in minutes and speeds up healing of the injured, inflamed tissue.

In case after case, while gently relieving pain, actual reduction (shrinkage) took place.

Most important of all—results were so thorough that this improvement was maintained over a period of many months.

This was accomplished with a new healing substance (Bio-Dyne) which quickly helps heal injured cells and stimulates growth of new tissue.

Now Bio-Dyne is offered in ointment and suppository form called Preparation H. Ask for it at all drug stores—money back guarantee.

## FARMERS DEMAND

**2500**



**P.S.I.**

CYLINDER

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More and more farmers insist on operating ease and peak efficiency which Cross hydraulic cylinders give modern farm tools. Ask your dealer for rugged, dependable Cross cylinders, with and without depth stop control. Sold and serviced by Canadian Distributors and Dealers.

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WORLD'S MOST COMPLETE LINE OF HYDRAULICS

Plan farm production to produce maximum returns. Watch GUIDE-POSTS market forecasts, page 7.

## TO ALL POULTRY MEN AND HOG RAISERS

**nf-180\***

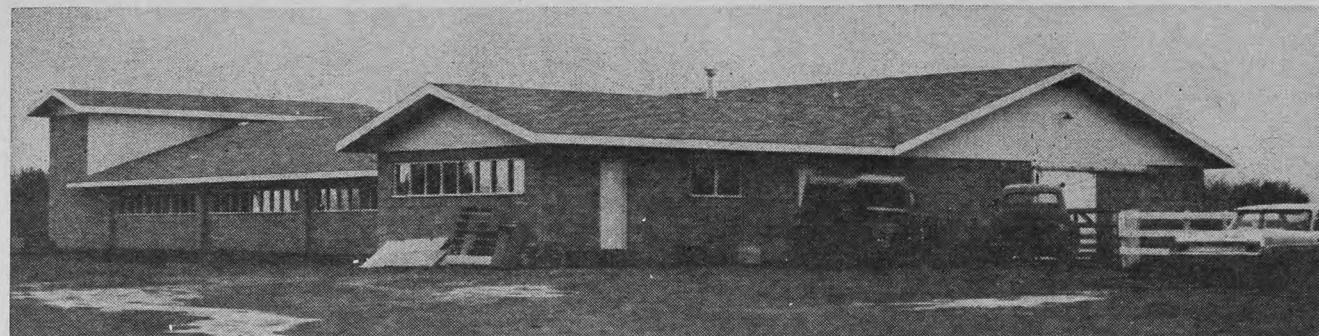
nf-180 in your poultry and hog feeds provides maximum protection against stress and disease.

When trouble strikes use nf-180 medicated feed, available from your dealer.

Detailed information is available on request.

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ST. THOMAS, ONTARIO

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## Ultra-Modern Dairy Barn

Art Scott sits at his desk in office of his new barn shown above.



A VISIT to Art Scott's new stanchion-type barn at Highway Farms on the outskirts of Red Deer, Alta., will prove that not all advances in dairy barn construction involve loose housing. Art's barn resembles the old-style hip-roofed building about as closely as a nuclear sub resembles a Spanish galleon. Gone are the bulky hay loft, round tower silos and dripping water troughs. In their place you will see a trim, low, concrete block structure with an attractive gable roof and a continuous line of thermopane windows.

Like most purebred men who sell breeding stock as well as milk, Art prefers a stanchion barn to any loose-housing set-up. You can keep your animals cleaner in this type of building, and give them more individual care.

"Raising purebred stock is like raising kids," he explained. "You get better results when you treat them as individuals. You can't have a valuable cow roaming around on the chance she'll be able to get enough to eat at a self feeder."

The Scott herd of 80 Holsteins contains three of the top blood lines in Canada. Twenty-nine milkers on R.O.P. test chalked up an average of 48 lb. of milk per day with a butterfat content of 4.1 per cent.

Before deciding on the design for his new barn, Art paid a visit to some of the best dairy farms in

Set of three bars over manger keeps cow from fouling bedded area, and stops her from tossing feed out.

Washington, Illinois and Wisconsin. His final plan included many features seen on his travels, plus a few ideas of his own.

The L-shaped, 144 ft. by 22 ft. building has 7,500 sq. ft. of working space, all on the ground floor. At the "toe" of the L is a neat, attractive office with herd trophies displayed in a glass case behind the desk. The next room contains the bulk tank and equipment cleaning facilities. Beyond this, is a modern washroom with shower, hot water heater and adjacent furnace room.

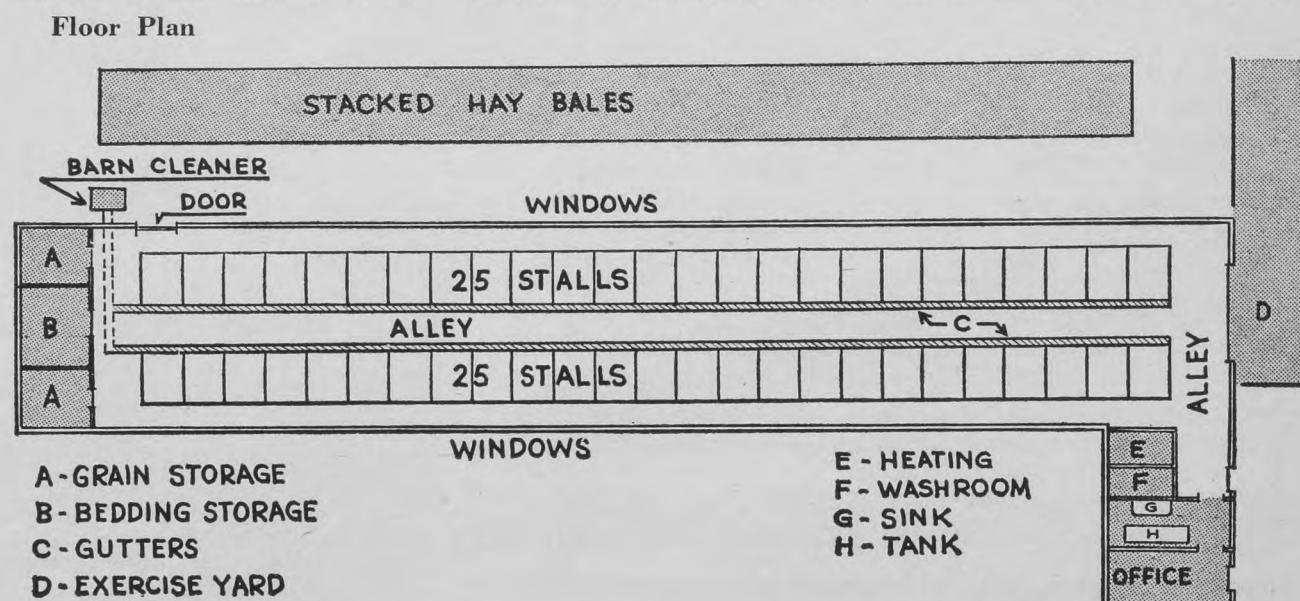
To the right is the "stem" of the L—the main part of the building. This contains two rows of comfortable (7 ft. x 5 ft.) metal stalls, 25 to a row. Over the manger runs three metal rails designed so as to force a cow to back up before she can raise her head to evacuate. Backing up puts her hind legs over the bed rail so she won't foul the bedded area. Conveyors in each gutter carry the manure outside. The front rails also prevent a cow

from throwing feed out of manger.

The stalls are served by automatic drinking fountains, a pipeline milking system and fluorescent lights. At the far end, in an elevated section of the building, are three big storage bins—one for bedding and two for grain. Feed is blown into the bins and distributed by hand carts. The air in the barn is kept fresh and dry by a series of ventilation fans.

Art built his barn with an eye to human comfort. "Producing milk isn't the most lucrative job in the world," he pointed out. "You might as well get as much enjoyment out of your work as you can."

The Scott family is active in agricultural and community affairs in the Red Deer area. Art is director of the Holstein-Friesian Board for Alberta, and a representative on the Quota Committee of their local dairy firm. Mrs. Scott is associated with the Clearview W.I., while sons, Jim 19, and Brian 13, have won honors in 4-H competition.—C.V.F. ✓



# 1962 Results of Cominco Demonstration Farms Announced

## BRITISH COLUMBIA DAWSON CREEK

Jeannette Brothers

Elephant Brand 11-48-0, applied at a rate of 100 lbs. per acre to wheat on summerfallow, resulted in an increased yield of 15.6 bushels per acre. After paying for the fertilizer, this resulted in an increased net profit of \$17.17 per acre.

Another field of wheat on summerfallow fertilized with 100 lbs. per acre of Elephant Brand 11-48-0, yielded a per-acre increase of 7.1 bushels for an extra net profit per acre of \$4.85.

Third crop barley on stubble gave an increased yield of 8.9 bushels per acre when fertilized with Elephant Brand 27-14-0 at the rate of 80 lbs. per acre. After deducting the cost of the fertilizer, the net increased profit amounted to \$4.35 per acre.

The growing season was cool and dry but the extra profits obtained on the three demonstration fields indicate the worth of the intensive cropping and fertility program followed on this farm.

## ALBERTA CLARESHOLM

Bill Yorgason

A broadcast application of 300 lbs. of Elephant Brand 16-20-0 per acre on brome-alfalfa (50-50) resulted in a net profit increase of \$8.30 per acre after deducting the cost of the fertilizer. This crop was irrigated once with 3" of water.

Spring wheat on cover cropped summerfallow received 165 lbs. per acre of Elephant Brand 16-20-0 applied with the seed. An increased yield of 4.1 bushels per acre resulted in a net gain of \$0.42 per acre after paying for the fertilizer.

Spring wheat on stubble broadcast with 110 lbs. per acre of Elephant Brand Nitraprills followed by 60 lbs. per acre of Elephant Brand 16-20-0 applied with the seed gave an increase of 3.9 bushels per acre. Although this resulted in a dollar gain of \$5.46 per acre, it represented a net loss of \$1.22 after deducting fertilizer costs.

The spring wheat demonstrations carried out on this farm didn't show a normal fertilizer response due to an unusually dry growing season—only 3" of rain.

## SHEPPARD

Fred Ollerenshaw

Despite a dry season, wheat on summerfallow fertilized with Elephant Brand 11-48-0 at the rate of 50 lbs. per acre realized a net profit of \$12.86 per acre after deducting \$2.54 per acre for fertilizer.

Wheat on summerfallow in another field on this farm, again with 50 lbs. per acre of Elephant Brand 11-48-0, resulted in an increased profit of \$9.36 per acre after deducting the cost of the fertilizer.

A spring application of 150 lbs. of Elephant Brand Urea per acre on Russian wild rye grass grown for seed returned an extra profit of \$73.05 per acre after deducting the cost of the fertilizer. The fertilized stand yielded 460 lbs. per acre—an increase of 321 lbs. over the unfertilized check strip.

## RED DEER

Dave Larratt

A field of brome and alfalfa (mostly brome), for hay, received a spring application of 300 lbs. of Elephant Brand Nitraprills per acre. The increase of 1.8 tons per acre represented a net profit of \$25.80 per acre after paying for the fertilizer.

Fourth crop barley fertilized with 100 lbs. per acre of Elephant Brand Urea (broadcast) and 50 lbs. of Elephant Brand 11-48-0 applied with the seed yielded 52 bushels per acre, compared with a 29.3 bushel yield on the unfertilized check. After deducting the fertilizer cost, this netted an increased profit of \$11.30 per acre.

## BUFORD

Emil Kvarnberg

A 100 lb. per acre application of Elephant Brand Urea on brometimothy-alfalfa (20%) produced a yield of 2.32 tons per acre, for an increased dollar return of \$12.60. After deducting the \$4.88 per acre fertilizer cost, this resulted in a net profit increase of \$7.72 per acre from the first cut.

Fifth crop barley on stubble with an application of 80 lbs. of Elephant Brand Urea and 50 lbs. of Elephant Brand 11-48-0 per acre realized a net increase of \$17.04 per acre after paying \$6.36 for fertilizer. The fertilized stand yielded 41.5 bushels per acre, an increase of 26 bushels over the check.

On the same farm, barley on summerfallow with an application of 50 lbs. per acre of Elephant Brand 11-48-0 yielded 66.2 bushels per acre, compared with 51.3 bushels from the check. This resulted in an increased profit of \$10.95 per acre after paying for the fertilizer.

## ST. PAUL

Charles Dargis

Oats on stubble fertilized with 80 lbs. per acre of Elephant Brand 16-20-0 showed a yield increase of 13.2 bushels per acre. After deducting the fertilizer cost, this realized an extra profit of \$4.25 per acre.

A feed mix of oats, wheat and barley treated with 50 lbs. per acre of Elephant Brand 11-48-0 yielded 47.5 bushels per acre, compared with a 40.3 bushel yield from the unfertilized check. This resulted in an increased net profit of \$3.13 per acre after paying for the fertilizer.

On the same farm, a grass-legume hay mix yield was increased by 2 tons per acre with a 150 lb. per acre application of Elephant Brand 16-20-0. A fertilizer investment of \$5.65 per acre, resulted in an increased profit of \$30.35 per acre after paying for the fertilizer.

## SASKATCHEWAN

### DORINTOSH

John Spreitzer

The total rainfall recorded on this farm was less than 4 inches during the growing season. It is expected that the rates of fertilizer used will have an important carry-over effect on next year's crop.

### 4 Years' Results Show These AVERAGE EXTRA NET PROFITS

| ON SUMMER-FALLOW                           | ON STUBBLE & SOD BREAKING                  | ON FORAGE                                   |
|--|--|---|
| <b>\$8.93</b><br>EXTRA NET PROFIT PER ACRE | <b>\$7.29</b><br>EXTRA NET PROFIT PER ACRE | <b>\$11.84</b><br>EXTRA NET PROFIT PER ACRE |
|  |  |   |
|  |  |   |

With Recommended Rates of ELEPHANT BRAND FERTILIZER

These extra net profits are the four-year average of farm-scale use of Elephant Brand Fertilizer on 144 Demonstration Farm fields — 49 on summerfallow, 60 on stubble and sod breaking and 35 on forage. In every case these figures represent the increased net profit per acre after deducting the cost of the fertilizer.

The results of the 1962 Demonstra-

Brome grass with a spring application of 200 lbs. of Elephant Brand Nitraprills per acre returned an extra profit after paying for fertilizer of \$5.80 per acre.

Oats on stubble broadcast with 150 lbs. per acre of Elephant Brand Nitraprills followed by 60 lbs. of Elephant Brand 11-48-0 sown with the seed showed a net profit after paying for fertilizer of \$0.96 per acre.

Wheat on summerfallow treated with 60 lbs. per acre of Elephant Brand 11-48-0 yielded an extra 12.1 bushels per acre for an additional profit of \$12.64 per acre after paying for the fertilizer.

## PRINCE ALBERT

C. C. Leach

Wheat on summerfallow treated with a 50 lb. per acre application of Elephant Brand 11-48-0 yielded 12.9 bushels per acre over the unfertilized check. After paying the \$2.65 invested in fertilizer, the increased profit per acre amounted to \$14.12. The unfertilized crop suffered severely from Browning root rot.

Wheat on stubble received a broadcast application of Elephant Brand Nitraprills at 100 lbs. per acre, plus 50 lbs. per acre of Elephant Brand 11-48-0 applied with the seed. Yield increase averaged 6.4 bushels per acre, with an increased profit of \$1.75 per acre after paying for the fertilizer.

## NAICAM

Forrest Hetland

An application of 45 lbs. per acre of Elephant Brand 11-48-0 on Montcalm barley seeded on summerfallow produced a yield increase of 23.7 bushels per acre over the unfertilized check. After deducting \$2.34 per acre for fertilizer an increased net profit of \$23.73 was obtained.

On the same farm, flax seeded on summerfallow and fertilized with 35 lbs. of Elephant Brand 11-48-0 per acre produced 4.2 more bushels per acre than the unfertilized check. Sold as registered marine, this flax realized an extra net profit of \$19.16 per acre after deducting \$1.84 for fertilizer.

## MOOSE JAW

George Grigg

A seeding of Ramsey durum wheat on summerfallow fertilized with 45 lbs. per acre of Elephant Brand 11-48-0 returned \$27.38 more profit per acre than the unfertilized check. The \$2.22 spent on fertilizer increased the yield from 27.4 to 42.2 bushels per acre.

Ramsey durum grown on stubble fertilized with 75 lbs. per acre of Elephant Brand 23-23-0, gave an increased yield of 10.3 bushels per acre. Extra

profit due to fertilizer use was \$17.42 above the fertilizer cost.

## PLENTY

George Swan

An application of 40 lbs. per acre of Elephant Brand 11-48-0 to summerfallow durum wheat raised the yield from 16 to 22.6 bushels per acre. After paying for the fertilizer, this meant an extra profit of \$8.02 per acre.

## MANITOBA

### FORTIER

Ed Rempel

Elephant Brand 16-20-0 broadcast at a rate of 150 lbs. per acre on a two-year-old stand of alfalfa-brome hay produced an increased profit after paying for the fertilizer of \$6.39 per acre on two cuttings. Although the fertilized area was lower and subjected to flooding during the wet summer season, it produced 0.81 more tons per acre than the unfertilized check.

A second demonstration on this farm was conducted on second crop wheat. Elephant Brand Nitraprills was broadcast at a rate of 120 lbs. per acre, followed by 50 lbs. per acre of Elephant Brand 11-48-0 applied with Selkirk wheat seed. A yield of 59.5 bushels per acre, 13.6 bushels higher than the yield from the unfertilized check, realized an increased profit of \$13.05 per acre after paying for the fertilizer.

## ALTONA

Driedger Brothers

Three tests were carried out on this Demonstration Farm. Herta barley on stubble, fertilized with Elephant Brand 23-23-0 at a rate of 80 lbs. per acre, yielded 61.5 bushels per acre, for a net profit increase of \$11.80 per acre after deducting the cost of the fertilizer.

Rodney oats on stubble with an 80 lb. per acre application of Elephant Brand 23-23-0 gave a yield increase of 26.1 bushels per acre over the check. After deducting \$3.80 for fertilizer, this resulted in a profit gain of \$11.86 per acre.

Broadcast application of 200 lbs. per acre of Elephant Brand Nitraprills on Meadow Fescue for seed doubled the yield over the unfertilized check. The extra 400 lbs. per acre increased the net profit to \$16.00 after paying for the fertilizer.

## SILVERTON

Stanley Mushumanski

In 1962 this area was one of the few which suffered severe drought conditions during the growing season.

Elephant Brand Nitraprills applied at 125 lbs. per acre to brome hayland increased the yield by 1,075 lbs. per acre. The value of this increased yield, less the cost of the fertilizer, raised the net profit by \$3.15 per acre.

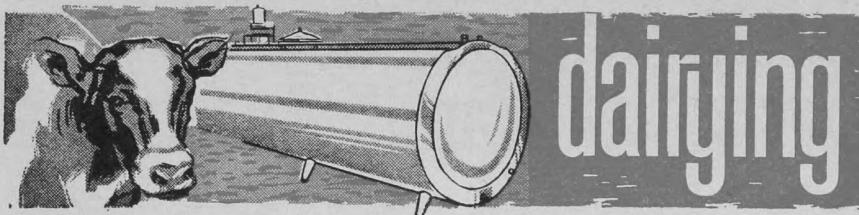
Barley on fallow yielded 56.2 bushels per acre when fertilized with Elephant Brand 11-48-0 applied at a rate of 40 lbs. per acre—an increase of 10 bushels per acre, and a net profit gain after paying for the fertilizer of \$6.92 per acre, over the check.

An application of 75 lbs. per acre of Elephant Brand 16-20-0 on stubble wheat raised the yield by 2.7 bushels per acre. And gave an increased net profit after paying for the fertilizer of \$0.93 per acre.

## ROBLIN

Gordon Jory

Elephant Brand 11-48-0 applied at a rate of 50 lbs. per acre on a field of registered Keystone barley resulted in a yield of 15.9 bushels per acre higher than the unfertilized check. With an increased selling value of \$14.30, the \$2.75 invested in fertilizer paid off in \$11.55 extra profit per acre.



## Concentrates and Pasture?

**Y**OU can cut costs of milk production by reducing the concentrate levels during the season of good pasture production. But the level of concentrate to feed is governed by the quality of pasture available and the level of individual cow production.

In trials at the Agassiz Experimental Farm, B.C., they used two levels: high-level feeding with concentrate at 1 lb. per 4 lb. of 4 per cent fat-corrected milk produced, and low-level feeding of 1 lb. of concentrate at each milking (2 lb. per day). There were two groups of cows, each with 4 Holsteins and 1 Jersey.

All the cows were pastured together and handled in the same way, except for the difference in concentrate. Both groups were on each concentrate level for two 28-day periods, with a week between the 4 periods for changing the levels. For example: the group on the low level in the first period was changed to the high level in the second, to the low in the third, and to the high in the fourth.

The cows showed practically no change in body weight despite an excess of concentrate at the high level. But, on account of the high quality of pasture in the first two periods, some cows would not consume all the concentrate at the high level.

There was an increase in milk production when cows were on high concentrate, but they consumed 3.2 lb. of concentrate for each additional pound of milk. This would be uneconomical at present prices.

The concentrate ration was 700 lb. of barley, 800 lb. oats, 400 lb. bran, 50 lb. 44 per cent soybean meal, 50 lb. 37 per cent rapeseed meal, 50 lb. mineral supplement.

Crude protein content of this ration ranged from 15.5 to 17.5 per cent in the various batches used, indicating the difference in protein arising from different sources of oats and barley.

The first trial of the series indicates that feeding concentrate at 1 lb. to 4 lb. of fat-corrected milk is unnecessarily high when good pasture is available. However, the concentrate did give some increase in milk, so supplementation of pasture somewhere between the two levels of concentrate is indicated — at least for cows milking heavily. V

## More Milk with Bulk Tanks

**O**NCE the conversion to bulk milk handling is made, a substantial increase in milk production might be expected from most dairy farmers, according to E. E. Hum-

bert of the University of Saskatchewan's dairy department.

A random survey was made in the Saskatoon milkshed, which showed that out of 27 can shippers, 13 were relatively small dairy farmers shipping less than 100,000

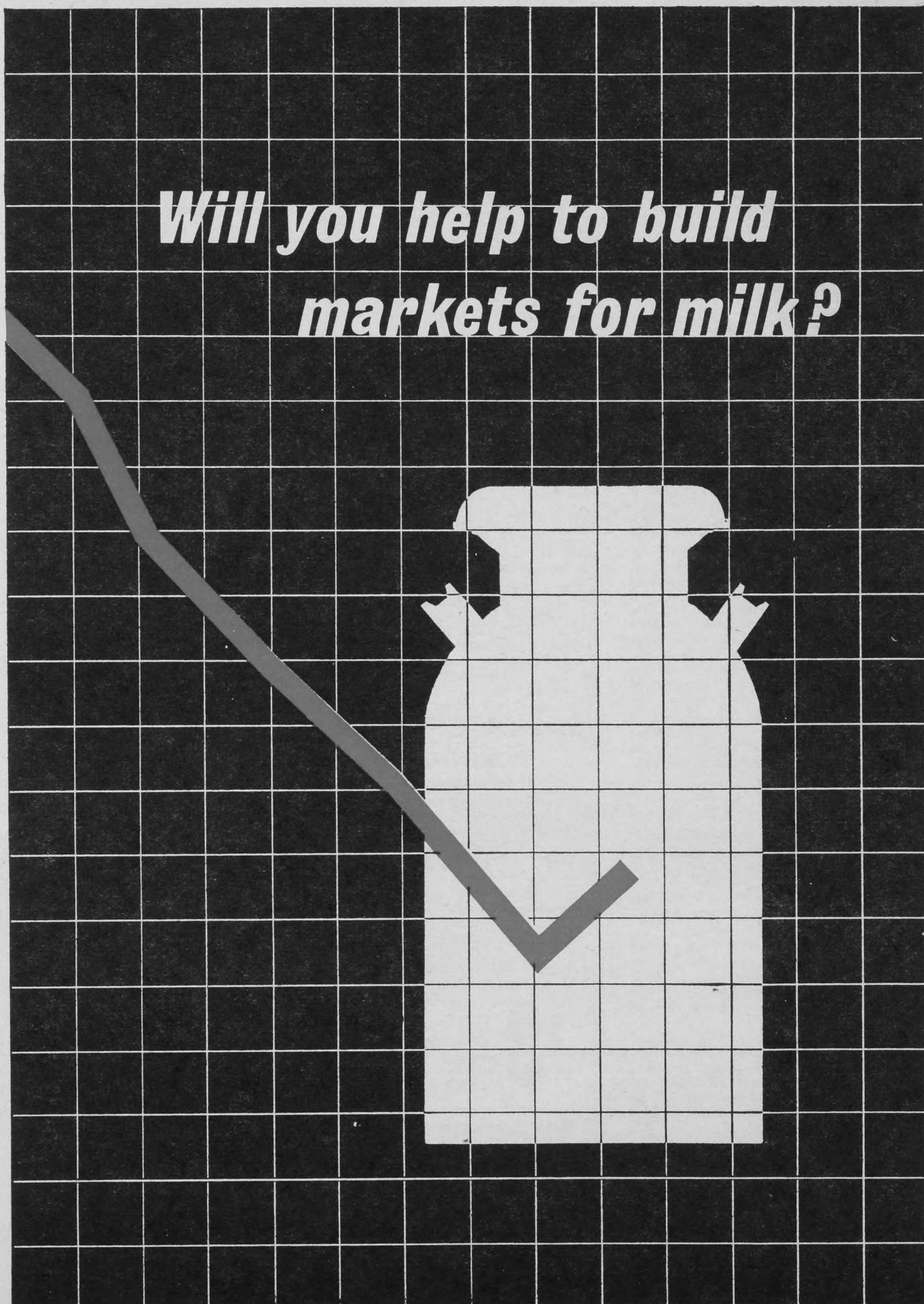
lb. of milk per year. The other 14 produced from 102,320 to 188,760 lb. Of 20 shippers who had converted to the bulk system in 1959, all shipped in excess of 100,000 lb. of milk.

When can and bulk shippers of similar size were compared (these were shipping about between 100,000 and 200,000 lb.) only the bulk producers showed a consistent expansion. The average bulk increases were 27.4 per cent in the first year, and 40.5 per cent in the second year, after conversion. The can shippers actually showed a slight decrease in production during the same 2 years.

Another point noted was that even though the larger shippers (over 200,000 lb.) were all using the bulk system, the yearly changes were considerably less, indicating that perhaps they were already near their maximum capacity before they converted to bulk handling. V

## See They Have Plenty of Water

**S**UMMER seems to be a long way off, but there's something to be said for planning a few items before the warm weather



comes—and water is one of these items.

According to dairy specialists of the Ontario Department of Agriculture, dairy cows need more water per pound of body weight than any other farm livestock. This is not surprising when it is reckoned that milk contains about 87 per cent water. Therefore, it is essential to have plenty of fresh clean water available to the dairy herd at all times.

Cows also need water to maintain their normal body temperature. They require large amounts of water, and it is impossible to satisfy

their thirst if they are allowed access to water only once or twice a day in summertime.

If cows lack water, one of their first reactions is to decrease their milk. The ideal water supply is clean, free from contamination, and easily accessible. It is also important to provide plenty of shade which will help them to keep cool.

By planning to provide adequate water and shade, you can help to avoid a drop in milk production in July, August, and early September, and you'll put a larger milk cheque in your pocket. ✓



Per capita consumption of dairy foods in 1961 was 142 lbs. lower (in terms of fluid milk equivalent) than in 1950. (This represents 32,000,000 80 lb. cans of milk in a year.) A slight improvement in 1962 was due to the government's consumer subsidy of 12 cents per pound on butter.

An important reason for the decline in consumption of dairy foods has been the heavy advertising and sales promotion (millions of dollars spent every year) in support of competitive and substitute products.

Dairy producers have decided to do something about the situation. They've agreed to make an *all-out effort to re-capture, re-build, re-activate markets for milk . . . to keep dairy farming alive by keeping markets alive.*

At a time when our per capita consumption is at a near-low, our production per cow, per farmer, per acre is at an all-time high . . . and likely to rise higher.

*If we are going to produce more we must sell more.* The new year-round advertising set aside of  $\frac{1}{4}$  of one per cent of milk and cream cheques (or its equivalent) is designed to do this . . . to build markets for milk by promoting milk and the products made from milk.

Effective June 1, 1963, this new plan goes into effect. It was adopted by the delegates (from 42 producer associations from all parts of Canada) at the Dairy

Farmers of Canada annual meeting in January of this year. It developed from a full year's study given the subject by a committee of responsible producers, elected to this task by these delegates a year earlier.

If you are a dairyman you will have received a letter from Dairy Farmers of Canada in which this plan was detailed. If you were by any chance overlooked or if this folder has been mislaid, write us for another. Be certain you understand the proposal and its special significance to you.

In future this program will be administered by THE DAIRY FOODS SERVICE BUREAU, an organization created by the member-bodies of Dairy Farmers of Canada, to operate jointly with Dairy Farmers of Canada but removed from the influence of those farm leaders whose responsibility it is to formulate policy for Dairy Farmers of Canada. In short, this program is designed to operate 'without strings' in order to acquire maximum support from all segments of our industry and from the consuming public.

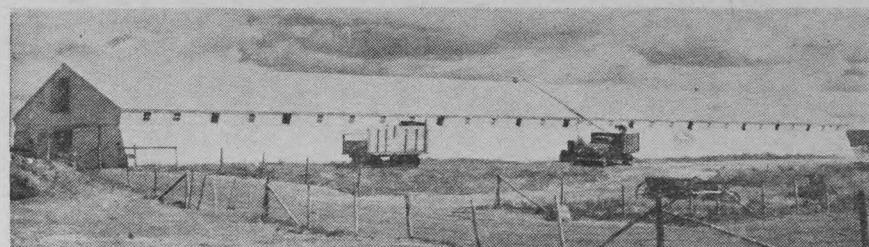
Regional committees, from which will come the national administrators of this program, have been established in the following regions (a) British Columbia and Alberta (b) Saskatchewan and Manitoba (c) Ontario (d) Quebec and (e) the Maritime Provinces. Give your regional committee your full support. Help them help you to sell more milk.

To be successful this program needs the unstinting participation of every Canadian dairy farmer. Your fellow-producers in every part of Canada are counting on YOU. Be a backer in the expansion of the markets for your own production!



DAIRY FARMERS OF CANADA, 147 DAVENPORT ROAD, TORONTO 5, ONTARIO

## Big Barn with Modern Conveniences



**S**AID to be the largest dairy barn in Saskatchewan, this 112-place stanchion-type building on the A. I. Katz farm at Red Deer Hill, south of Prince Albert, is of

rigid frame construction. It has fluorescent lighting, a drinking fountain for every two places, automatic manure removal, and a pipeline milking system.—C.V.F. ✓

## Rapid Changeover to Bulk Tank Storage

**D**AIRY Plant Inspection Supervisor, L. M. Silcox, of the Alberta Department of Agriculture, attributes a steady progress in quality milk production to the increasing use of bulk tanks on Alberta dairy farms.

Dairy farms in that province now have a total of 866 bulk tanks and 48 tanker trucks moving milk.

He says the phenomenal growth in the use of this type of equipment is not surprising in view of an ever increasing demand for top quality products from the consuming public. The system saves labor, time and worry of keeping up quality while milk is awaiting shipment.

He reports that bulk tank installations are 100 per cent completed in the Edmonton and Calgary milk-sheds while other areas are making a rapid transition to this method of handling milk. ✓

## Stripping May Be Unnecessary

**T**HE results of recent experiments at the National Institute for Research in Dairying in Britain suggest that stripping dairy herds may be a thing of the past before long. The experiments showed that the fall in the butterfat content of the whole milking is not seriously affected after stripping.

Cows which were left regularly with about 10 per cent at each milking first showed a fall in butterfat, then a rise, and eventually settled down at a level little different from cows which were stripped.

A. S. Foot, head of the dairy husbandry branch, says the saving in time involved in cutting out the stripping process may well offset any small drop in butterfat production in herds with a high-speed milking routine. ✓

## 365-Day Records

**D**AIRYMEN don't need 365-day records on a cow to tell how good a producer she is, says E. L. Corley, a dairy scientist at the University of Wisconsin.

Corley says a study of more than 81,000 production records has shown that 305- and 365-day records are equally good for selection purposes.

In all groups the 305-day records for 1 year were as good as those for 365 days, for predicting the following year's production, he said. ✓



Mrs. Reinink examines the difference Gillett's Lye makes: drinking fountains come sparkling clean and germ free.

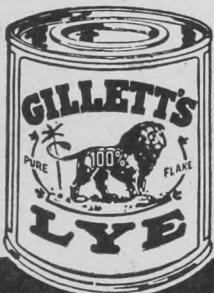
## NO ROOM FOR RISKS IN THE POULTRY HOUSE!

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"We use Gillett's Lye in every phase of our poultry operation," says Mr. Reinink, "from disinfecting baby chick drinking fountains, to spraying roosts for layers."

Regular use of Gillett's Lye cuts down, keeps down, risks of poultry disease. It's the most effective yet inexpensive all-round cleanser and disinfectant on the market.



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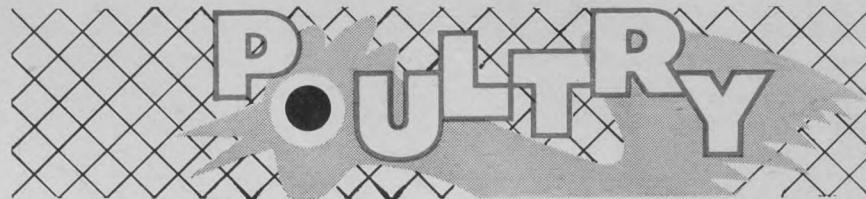


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Fergus Ontario



## Grit Essential for Good Feed Conversion

MORE efficient use is made of all-mash rations when the grinding job is done by the hens themselves, Dr. Rollin H. Thayer of the Oklahoma experiment station told the Granite Grit Institute of America recently.

While the entire diet was being ground by feed manufacturers, it was still not fine enough for maximum digestion, he said. To do so it would have to be rendered as fine as flour and would not be very appetizing to poultry.

It was essential that the proper type and size of grit should be available to enable the food to be further broken down in the gizzard, he said.

Caged layers should have insoluble grit provided weekly or every 2 weeks by sprinkling it on top of their feed or by mixing 1 or 2 per cent into the feed 1 day out of each week. It has been established that when grit of the proper type and size is provided it remains in the gizzard for at least 1 or 2 weeks.

Dr. M. L. Scott of Cornell University said birds which received insoluble grit appeared not to be so flighty and prone to feather-picking and cannibalism, as were birds which were fed a high-energy all-mash without access to insoluble grit.

He also pointed out that debeaked birds have tender bills and will eat more grit if it is mixed in the feed rather than provided in separate hoppers.

Dr. S. J. Slinger of the Ontario Agricultural College said whole-beaked pullets consumed much more grit, resulting in better growth and feed efficiency than debeaked birds in tests at the college.

The addition of grit to a high-energy diet produced pullets with better developed digestive systems than did high-energy feeds alone, according to the West Virginia experiment station.

High-fiber diets resulted in gizzards that weighed 10 per cent more than those from pullets fed high-energy rations. However, when grit was added to the high-energy ration it produced gizzards weighing 10 per cent more than those from birds on high fiber without grit.

### Broodiness Stopped By 24-Hour Treatment

BROODINESS in turkey breeder hens has been successfully interrupted and an early return to laying achieved in experiments at the Swift Current Experimental Farm, Sask.

R. M. Blakely says recent research has shown that one or two 24-hour sessions in an "intense lighting" pen were sufficient to break up broodiness in about 90 per cent of the birds tested.

The pen consisted of a small slat-floored area equipped with one 100-watt light bulb with reflector for each 16 to 20 square feet of floor space. The lights were suspended on drop cords to within 4 feet of the floor. All corners where birds were inclined to sit were filled in with plywood.

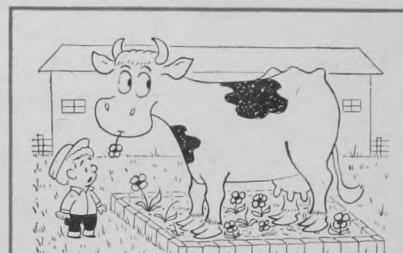
Mr. Blakely says the hens should be moved to the intense lighting pen at the first sign of broodiness. They should remain there for 24 hours and be given only water. At the end of this period they should be returned to the breeding pen. If one treatment has not been enough, they will usually "repeat" within 48 hours. "A second session in the lighted pen is usually sufficient," he said. V

## Confinement Has Worked Well

THE feeds now available make it possible to raise good birds in confinement, according to Leonard Griesbach of the Fredericton Research Station, N.B. He points out that there is usually less labor in confinement rearing, and there are fewer losses from predators than would be the case when raising chickens on range.

The cost of housing need not be higher than that of maintaining good range conditions. Unused brooder houses, or other unoccupied buildings, will often need very little remodeling. A pole-type barn can provide suitable protection at no higher cost than predator-proof fencing, shelters, and other equipment needed on range.

Mr. Griesbach reports tests that showed there need be no difference in egg production, egg quality, or mortality in the laying house, when comparing flocks raised in confinement with those reared on range. The range birds are lighter when



"Well, from the way she's waving that ball bat, I'd suggest you start scooting for Afghanistan or some place!"

## Be Prepared for Fire



[OAC photo]

Keep fire extinguishers by the door where you won't run through flames to reach them, says Prof. Earl Hunt. This water-filled extinguisher is very cheap. Check twice a month for evaporation or damage to rubber fittings.

housed, but catch up in the laying house.

They have been raising broiler strains in confinement at Fredericton for the past 2 years. Floor space per bird during the rearing period was a little more than 3 sq. ft. Pullets developed well and had a better bloom than most range-raised birds. Debeaking wasn't necessary until pullets were in laying pens, but may be needed earlier in some conditions.

Proper nutrition is important in confinement. For instance, disorders

sometimes arise from nervous excitability among pullets raised indoors when moving them to the laying house. Disorders are overcome by feed fortified with antibiotic for a few days after the move.

Confinement rearing is not recommended where farm grains are cheap, and good grass range free from predators is available. When part of the flock has to be hatched too early or too late to take full advantage of range rearing, full confinement may be the answer. V

## Range Rearing Points to Consider

POULTRYMEN raising laying or breeding stock should consider several factors before deciding to put their birds out on range, according to the Ontario Department of Agriculture.

Among those worth considering are:

- Range area.
- Soil type.
- Pasture Quality.
- Equipment.
- Labor involved.
- Protection available for chickens.

Poultry specialists with the department suggest a maximum of 300 to 400 birds per acre on very good pasture. Such pasture should be clipped so that growth does not exceed 4" in height.

They point out that on poorer pasture strips oats and corn are often sown—the oats increasing the supply of greens and the corn providing valuable shade.

While it has been maintained that healthier and hardier birds are reared on range, the high cost of land and lack of protection from foxes and other predators may make indoor rearing necessary. With sound management practices many poultrymen have been successful in raising good sturdy flocks indoors.

Further information regarding rearing of poultry flocks is available in the Ontario Department of Agri-

culture Publication No. 527 obtainable from agricultural representatives in that province. V

## Creating New Turkey Cross Strains

THE Canada Department of Agriculture has embarked on a breeding program aimed at lowering turkey production costs by exploiting hybrid vigor.

M. S. Mitchell of the Poultry Division said a number of breeders from across Canada are co-operating in the cross strain program.

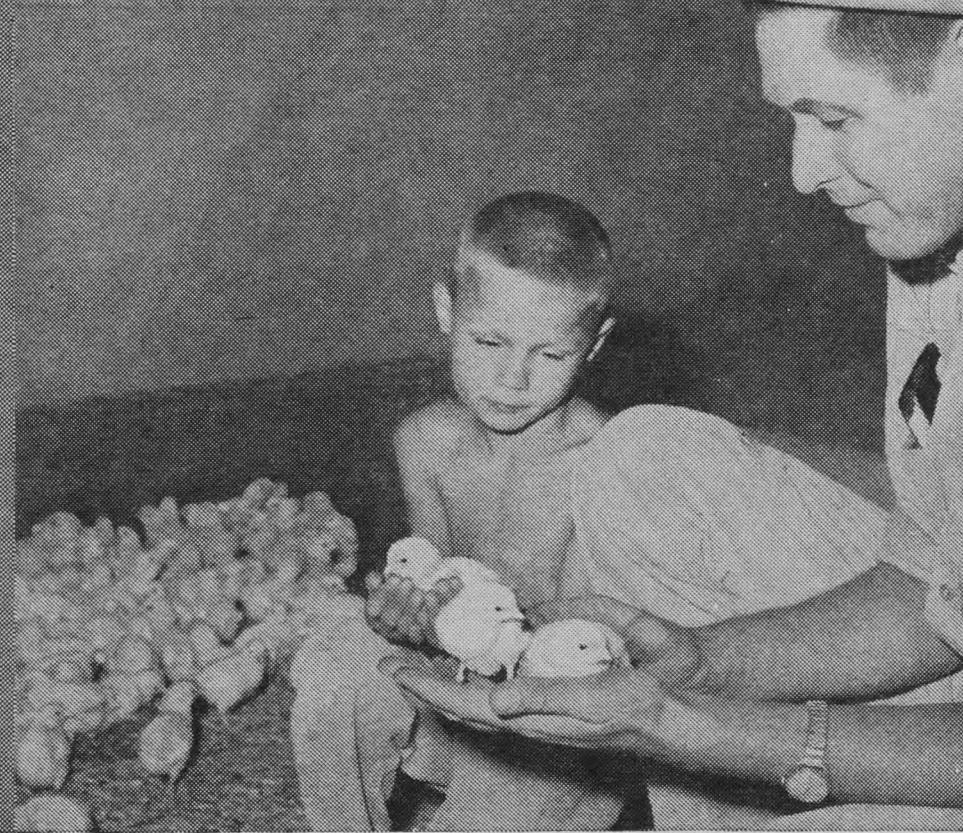
According to Mitchell the immediate objective is to screen available strains suitable for combining. Those that are suitable will lead to lower poult costs as well as increased meat for sale.

In establishing a three-way cross strain, females from one or more strains are distributed into pens at random to be mated to males of other strains. Two hatchings of the resulting first cross females are then distributed for mating to obtain the eventual three-way cross pouls. The males producing the three-way cross pouls are rotated among the types of first cross females.

The program is a new approach to turkey breeding in Canada. Officials are hoping that the co-operation shown by breeders and the wide divergence of strains made available for breeding will lead to the development of superior commercial pouls for the turkey industry. V

successful  
feeders  
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## Saskatchewan:



Orly Odsen, shown with son Darryl, is one of a three man company (Silver Crest Farms Ltd.), heading up large scale broiler production in their province.

Orly Odsen, Thelmer Askeland, Harold Rhodes of Assiniboia, produce about 100,000 broilers a year. Good buildings, equipment and management turn out quality birds. Figures in an average turn. 10,000 birds off at 57 days — average weight — 3.7 lbs, feed conversion 2.467. Silver Crest Farms use "Miracle" Feeds exclusively.

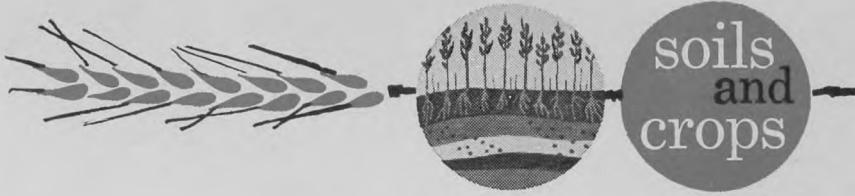


# What's New in Weed Control

THE main herbicides used in oats, barley and wheat crops continue to be 2,4-D and MCPA, but these don't control all weeds. Other herbicides are recommended for specific purposes. For instance, if thistles are a problem, 2,4-DB will control them. Chickweed, purslane and a few other weeds can be handled by CMPP (mecoprop) or 2,4,5-TP (silvex)

which can be applied as separate sprays, or added to the spray tank with the 2,4-D or MCPA.

**Forage Crops.** Chemical weed control makes it possible to seed forage plants without a nurse crop, and enables one or two cuts of hay to be taken from the stand, on the year of seeding. The chemical commonly used is 2,4-DB. It is also useful in managing established stands.



It can be used to kill thistles, yellow rocket, chickory or curled dock in alfalfa or birdsfoot trefoil, providing treatment is made before flowers show on the weeds. This chemical will also take the top off leafy spurge.

**Corn.** Atrazine is still the key chemical for weed control, used preferably as an early post-emergence treatment. Lorox is recommended for trial use as a pre-emergence treatment.

**Soybeans.** Although most people still control weeds in the crop by cultivation, effective chemical control is now possible. The most promising method utilizes the tremendous post-emergence activity of Lorox, in addition to its pre-emergence value.

Prof. G. E. Jones of the Field Husbandry Dept., O.A.C., Guelph, recommends establishing a seedbed and allowing the weeds time to germinate. Spray with Lorox at about one pound per acre. Plant the beans, and the Lorox will continue its activity while the beans are germinating and becoming established.

**Turnips.** A new program, devised at O.A.C., promises to take the hoe-

minating seedlings, but won't control perennial weeds which have viable rootstocks in the ground. Additional control must be worked out for the latter. Prof. Jones suggests you might control perennials such as twitch through cultivation, or through spraying with Dalapon a month before planting the turnips.—D.R.B. ✓

## Still Recommend Selkirk, Pembina

A SEVERE leaf rust attack on wheat in Manitoba in 1962 failed to do serious damage, says cereal crops agronomist A. L. D. Martin of the Manitoba Department of Agriculture.

Delayed seeding of Selkirk and Pembina wheat, due to excessive moisture coupled with ideal climatic conditions for rust development brought on the attack, he said. Lee, another variety of wheat recommended for the province, is susceptible to the newer races of stem rust such as 15B, that attack the old standard variety Thatcher. The former ranks as second choice after Selkirk and Pembina. Both these two are equal in leaf and stem rust resistance.

The outbreak, which was the most severe in recent years has little bearing on the amount of rust to be expected in succeeding years, Mr. Martin points out. "Leaf rust, unlike stem rust, can be very severe without seriously affecting the crop yield," he said.

Selkirk and Pembina are still the farmers' "best bet," while delayed seeding for wild oat control in wheat is good management practice. Early seeding with the recommended rates of fertilizer will enable the crop to get ahead of damage from leaf rust, he said. ✓



A chemical weed control program devised by Prof. G. E. Jones at OAC checked weed growth in this turnip field last year and cut out hoeing.

## Ban the Barberry!

AN ornamental and hedge shrub, the common barberry, is behind the widespread oat stem rust in Eastern Canada. And, unless there is a countrywide program to eradicate the barberry, says Dr. F. J. Zillinsky of the Genetics and Plant Breeding Institute, Ottawa, the danger of infecting certain cereals and grasses in all parts of Canada will not be removed.

Discoveries of new races of rust in the lower St. Lawrence Valley and eastern Ontario have been traced back to barberry bushes which have become established as wild plants. The speed at which new races build up is as disturbing as

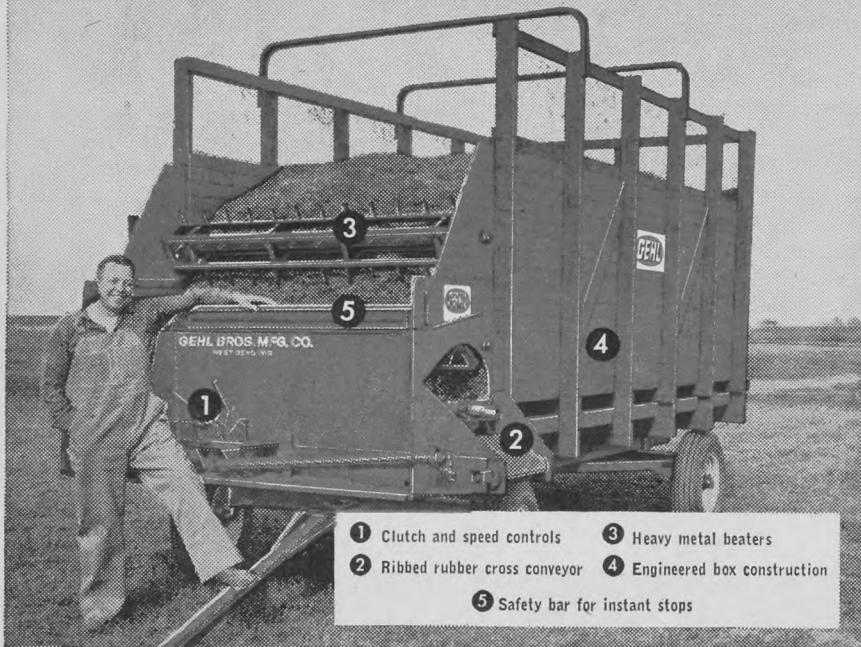
(Please turn to page 36)

ing out of turnip growing. Here is how it works. Establish a suitable seedbed. Apply the chemical, Eptam, at 3 pounds per acre, to the dry soil surface, and incorporate into the soil by discing, then plant the turnips.

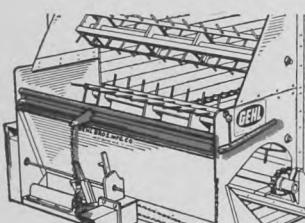
Prof. Jones explains that this may not be a perfect method of control. It is just recommended on a trial basis this year. But it has given satisfactory control at Guelph, and it should be useful to turnip growers.

The program is limited in that it takes out most of the annual broad-leaved weeds and grasses, and ger-

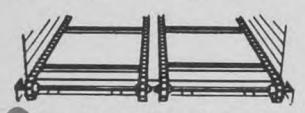
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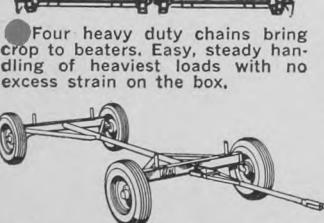
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*This familiar seed* soon may be stealing your profits by cheating you out of 20% to 30% of the yields you should get. Chances are that millions of these wild oat seeds are in your fields now awaiting the first sign of spring to spring up. Read below how you can build better crop profits by stopping these yield-reducing weeds after they emerge:

# How many of these "profit robbers" are in your fields right now?

ABOVE is the seed of the troublesome weed that seriously threatens your crop profits—the wild oat. Activated by normal temperature and moisture changes, it moves in a twisting, burrowing fashion to plant itself in your fields. Millions of them are probably there *right now*. Many of them may lie dormant for as long as five to ten years. But nearly every year, enough wild oats sprout to cause heavy infestations in various parts of your fields.

**Now earlier seeding; bigger yields**  
Until recently, the only ways known to fight wild oats have been summer fallow and extra tillage. Spring tillage, of course, delays seeding; makes it impossible to plant early enough for best yields. Now, Carbyne, a farm-proven wild oat killer, offers a more profitable method of control. Because Carbyne kills wild oats *after they emerge from the ground*, you can plant as early as soil conditions permit. Not only does this boost yields, but it saves you the time, trouble and cost of at least two cultivations.

#### One spraying only

Because Carbyne is applied *after* wild oats can be seen, you don't waste time or chemicals treating those parts of your field that are "clean" this year. When you mix Carbyne with water and spray it directly on the wild oat plants while they are in the 2-leaf stage, they become stunted and stop growing. Most die in a few weeks. Those not killed are so severely stunted they can't compete with your crop for plant food or moisture.

Carbyne treatment is a one-step spraying operation. For ground application, a good farm sprayer, equipped with the recommended nozzles, is ideal. Aerial application, using the services of a *qualified* Carbyne aerial applicator, is equally satisfactory.

Carbyne is the wild oat killer that never has to be mixed into the soil. There's no *extra* tillage (estimated to cost \$1 per acre) for soil incorporation after spraying. And rough or ridged fields need not be smoothed prior to application.

#### Recommended Crops

Carbyne is recommended for use on *spring wheat, durum wheat, barley, sunflower, mustard, sugar beets, flax, peas and rape*. These recommendations are based on four years of experiment station field testing, plus four years of Spencer Research field testing and extensive farm use in 1961 and 1962. Last year alone, Carbyne was used to stop wild oats on 469,000 acres of crops.

Chances are wild oats will be heavy in large parts of your fields this year. Why let these costly

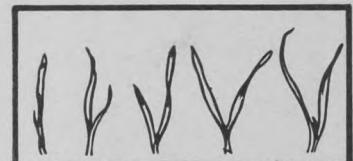
weeds rob your pocketbook another season? Get the facts about Carbyne now from your local farm

chemical supplier. He has a free Carbyne folder that will give you the latest facts on wild oat control.

#### Spraying permits earlier planting; can add as much as \$5 extra profit per acre

##### When to apply

Carbyne must be applied when a majority of the wild oat plants are in the 2-leaf stage. (Read label instructions carefully for exceptions to this rule.)



It's time to spray with Carbyne when a majority of the wild oats look like these. From stage at left until the third leaf starts (right) will be about six days, under normal conditions.

Now what do you get back? Let's use wild oat infested wheat for a typical example. Crop records show that when wild oats are stopped with Carbyne, wheat yields go up an extra 5 to 8 bushels an acre. Figuring wheat at \$1.33 per bushel, this means about \$7 extra income per acre. Cultivation costs are also reduced about \$2 an acre. So, you can expect to get back about \$5 extra profit for the \$4 per acre you invest in Carbyne.

Because timing is vital, it will pay you to get your sprayer ready well in advance. You can tell how many acres require treatment just as soon as wild oats emerge. This is the time to make sure you have enough Carbyne. See your supplier that very day for all the additional Carbyne you need. Next, check your fields daily to find when the majority of wild oats have reached the early 2-leaf stage.

#### FREE FOLDER

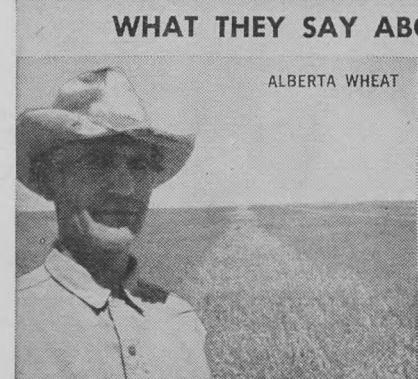
FREE full-color Carbyne folder gives latest facts on wild oat control. Pick up your copy now from your local Carbyne dealer—or just write CARBYNE, Spencer Chemical Company, Kansas City 5, Missouri.



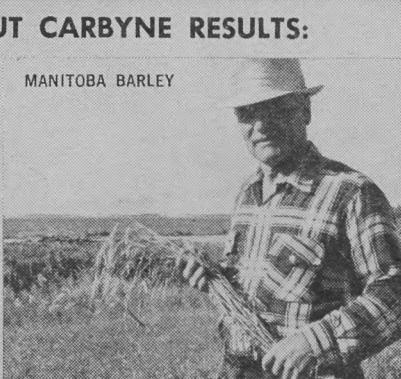
**Carbyne** . . . The wild oat killer that stops 'em after you see 'em

IS AVAILABLE FROM THESE COMPANIES OR THEIR DEALERS

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and CHIPMAN CHEMICALS, LIMITED**



**Lorne Huggard, Calgary:** "This photo shows how well Carbyne stopped wild oats in my 86 acres of Thatcher wheat last season. Wild oats were heavy in the unsprayed strip (center). Without Carbyne, I would have had to plow under the entire wheat planting."



**Perry P. Dunn, Winnipeg:** "Wild oats really took over in my Herta barley last year. So, I sprayed all 60 acres with Carbyne. It did the job. Proof is the 50-bushel average I got. You can bet I'll use Carbyne again this year if wild oats show up. Carbyne's a very good investment."

(Continued from page 34)

their ability to infect many different varieties, Dr. Zillinsky says.

The barberry bush is host to the overwintering stage of stem rust, and it provides the spores for infection of crops early in the season. It is also the breeding ground for new races of stem rust, acting as the key link in the sexual phase of their new life cycle.

Small lumps appearing on the barberry leaves indicate colonies of the rust fungus in the sexual stage. Rust organisms in each colony cross-fertilize with those in other colonies to produce the stage that infects cereals. It is during cross-fertilizing that hybrids and new races are produced that attack resistant varieties.

Dr. Zillinsky reports that new virulent races of oat stem rust are

being produced on the barberry faster than resistant varieties can be developed. V

### Place Seed Where It Works Best

ONE of the most common causes of poor stands of cereals and forage crops is deep or uneven seeding. W. E. Johnson of the Saskatchewan Department of Agriculture says the best depth control at seeding is a good seedbed. Late summerfallowing and spring tillage should

develop a firm soil at a uniform 3 inches, or less, to provide the seedbed and allow reasonable, shallow, uniform seeding.

Benefits from deep seeding under dry conditions are very limited, says Johnson. The crops are usually spindly and weak. A good root system depends on vigorous top growth.

Cereals should be seeded at 3 inches or less; flax, rapeseed, and other small-seeded crops at 2 inches or less; forage crops no deeper than 1 inch, and smaller seeds at  $\frac{1}{2}$ -inch depth, if soil moisture is satisfactory.

Good packing after seeding often reduces the effective seeding depth by an inch or more, and cuts the handicap on deep-seeded crops. V

### Trefoil Works in Northern Areas

BIRDSFOOT trefoil is the answer to a hay problem in northern Ontario and Quebec, and other areas of Canada where alfalfa doesn't thrive. Trefoil yielded 2 to  $2\frac{1}{2}$  tons of hay per acre in tests at Kapuskasing Experimental Farm, Ont., in 1961 and 1962. At Ville-Marie, Que., trefoil grown alone averaged 2.6 tons per acre during the past 3 years. At Guyenne, Que., more than 3.5 tons of hay per acre were harvested in the second year of trefoil.

P. P. Dermine of Kapuskasing Experimental Farm reports that in the Clay Belt area of the two provinces, the Empire variety of trefoil was 2 weeks later than Viking in maturing. Empire produced a denser growth of leafy, fine-stemmed plants. Both varieties yielded about the same.

Use Empire as a single-cut crop for late hay or silage, and Viking for a two-cut crop for hay, says Dermine.

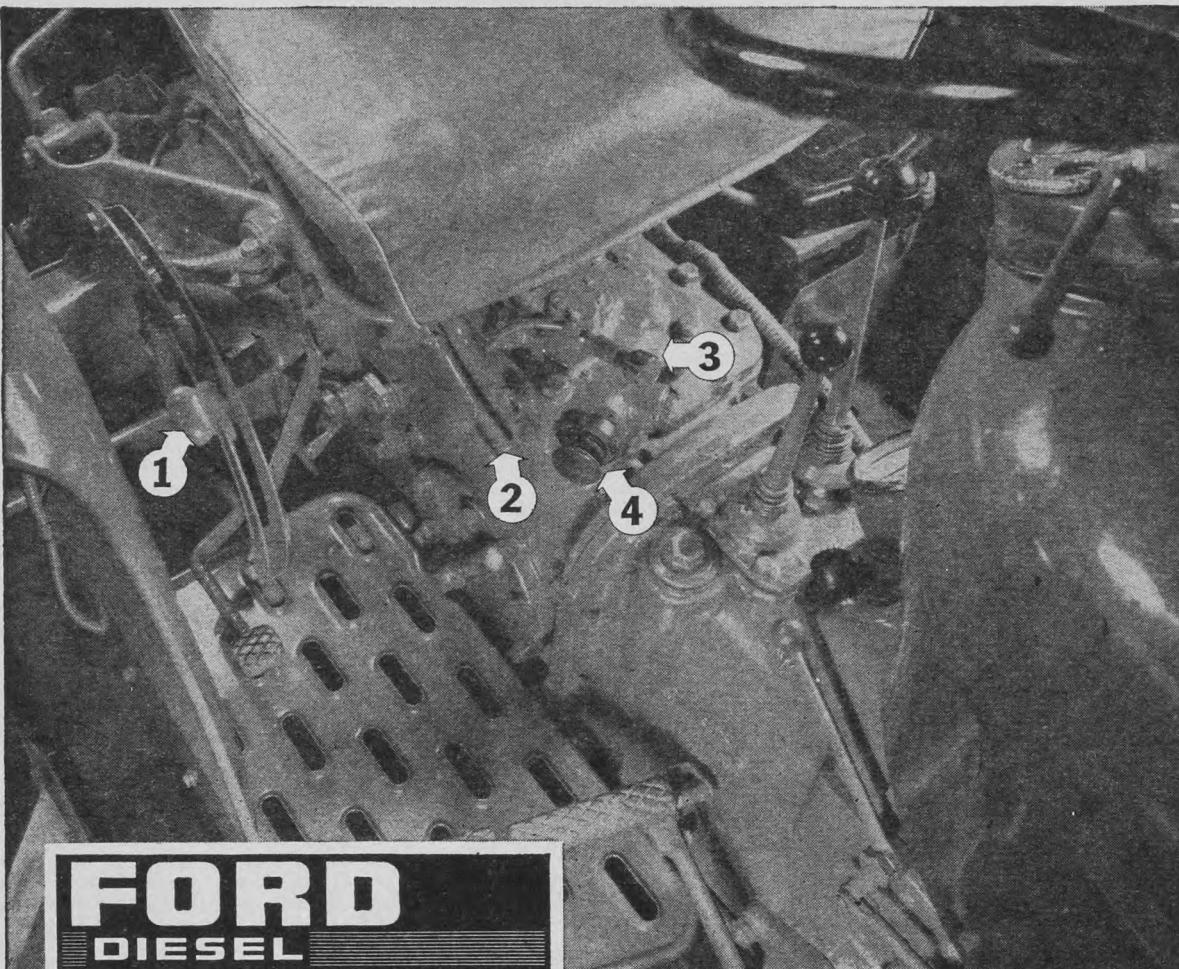
If birdsfoot trefoil is used as pasture, be careful with the grazing for the first 2 or 3 years. The legume should not be grazed until it is in bloom, and it must be allowed to recover fully before grazing again.

Fertilizer and weed control are the keys to good stands of trefoil. Apply a complete fertilizer at seeding time, and a good top-dressing of 0-20-20 every second autumn. Broadleaf weeds can be controlled by clipping the field once or twice during the year of seeding. With heavy infestations, it may be necessary to combine clipping with a herbicide—such as 2,4-DB—which will not injure trefoil. Couch grass is controlled best with dalapon. V

### What to Irrigate

SPRINKLER irrigation can boost profits from potatoes and alfalfa, but it's not economical for wheat. W. S. Ferguson reports tests at the Brandon Experimental Farm, Man., showed irrigation costs averaged \$15 to \$30 per acre, but only increased wheat yields 3 bushels an acre.

On the other hand, in 3-year trials, irrigation doubled the average yield of marketable potatoes and, in the drought of 1961, the extra water tripled the yield. Alfalfa yields increased by 1.7 tons an acre between 1955 and 1961 with irrigation, and were up 3.5 tons one year. V



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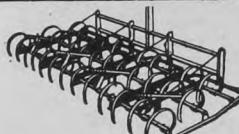
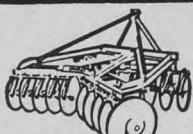
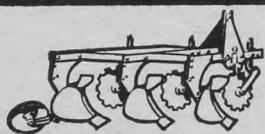
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**YOUR FORD TRACTOR DEALER IS THE MAN TO SEE FOR ALL FARM EQUIPMENT NEEDS**

## How Seeding Date Affects Weed Control

by N. A. KORVEN,

Weeds Supervisor, Metropolitan Corporation of Greater Winnipeg  
formerly at Swift Current Experimental Farm

**W**HAT can be done to reduce that \$255 million burden — about \$1,000 per farm — which is the estimated loss through weeds in Western Canada each year? A farmer can work his summerfallow to destroy weeds and conserve moisture. He can clean his grain, prepare a good seedbed, harrow or rodweed after seeding, and spray herbicides during the cropping year. And he should not overlook the date of seeding as a big factor in weed control.

Weeds that can be controlled by delayed seeding include stinkweeds, Russian thistles, pigweed, wild buck-

wheat, and wild oats. The table (below) gives figures from tests at the Swift Current Experimental Farm, Sask., which show weed counts taken when weeds and crops were in the proper stage for spraying. Stinkweeds and Russian thistles accounted for over 90 per cent of the weed infestation on fallow and stubble crops and, as seeding was delayed, the weed population was reduced. The figures were obtained during a relatively dry period, when rainfall for May, June, and July was about 2 in. less than the long-term average of 6.86 in.

WEED POPULATIONS FOR DATES OF SEEDING  
4-YEAR AVERAGE 1958-1961  
(Number of weeds per square yard)

| Date of seeding | Fallow              |                 |       | Stubble             |                 |       |
|-----------------|---------------------|-----------------|-------|---------------------|-----------------|-------|
|                 | Stinkweed & pigweed | Russian thistle | Total | Stinkweed & pigweed | Russian thistle | Total |
| 1. April        | 186                 | 117             | 303   | 196                 | 52              | 248   |
| 2. May 10-15    | 81                  | 44              | 125   | 71                  | 9               | 80    |
| 3. May 20-28    | 9                   | 5               | 14    | 9                   | 8               | 17    |



Good management: In this case, seeding was delayed until May 12 and the crop was sprayed. As a result, a 15-bushel crop was harvested from here.



Poor management: Same location, seeded early, not sprayed, 3-bushel crop.

The reduction in weed population from delayed seeding (as shown in the table) can be attributed to a combination of the following factors:

**Soil temperatures:** Research has indicated that grain crops make little or no growth until the soil temperature is over 40-42°F. Many weeds,

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however, will germinate under cooler conditions and become established before the grain emerges. Records at Swift Current reveal that the temperature of the soil at seeding depth during 1960 and 1961 was not warm enough for germination and growth of grain crops until after May 10.

**Time of emergence of weeds and crop:** Weeds in early-seeded crops often have a competitive advantage because the weeds usually emerge

before the crop. With delayed seeding, the grain has at least an equal chance and sometimes a competitive advantage over the weeds. Records show that early-seeded grain emerges in about 3 weeks compared to 1 week for later seedings.

**Destroying a weed crop before seeding:** Our tests showed that at the time of early seeding no weeds had emerged. However, a fairly dense growth was present at the time

of working the land for the second and third dates of seeding. By delaying seeding until there is good emergence of weeds, and with thorough seedbed preparation, all the weed growth will be destroyed.

Dates-of-seeding experiments at Swift Current show that delayed seeding resulted in increased yields. The average wheat yields for 3 dates of seeding over a 6-year period were as follows:

April, 23.1 bus./ac.

May 10-15, 25.7 bus./ac.

May 20-28, 27.3 bus./ac.

When herbicides were used for weed control, yields of wheat with the early seeding were still the lowest, and wheat seeded at the two later dates yielded about the same. These results indicate that early weed growth was the greatest hazard.

Wild buckwheat is classed as a hard-to-kill, broad-leaved annual which becomes increasingly resistant with age to normal rates of herbicide spraying. Swift Current tests show that wheat seeded in April has had a heavy infestation of buckwheat (where wild buckwheat seed is present in the soil) but that seeding after May 15 has resulted in virtually 100 per cent control.

Wild oats in the Swift Current area can be effectively controlled by a combination of delayed seeding and rodweeding about one week after seeding. Results of 6 years of testing at the Experimental Station at Kyle show that wild oat infestations in the crop were reduced to almost nil when seeding was delayed to about May 20 and the land was rodweeded 5-8 days later. The average increase in yield over early seeding (May 5) was 7.5 bushels per acre.

Generally speaking, a delay in seeding is a sound practice for good annual weed control for the brown soil zones of the Prairie region. The photographs show the extremes in production that can result from good and poor management practices of dates of seeding and spraying. Let the soil warm up before seeding and give the weeds time to emerge before preparing a seedbed. There is no need to rush the seeding operation. With the efficient equipment available on farms, seeding can usually be completed in about a week or 10 days. Take advantage of dates of seeding to give the crop the competitive advantage over weeds and increase wheat production on your farm.

## Farmers Warned on Treated Seed

FARMERS are urged to use extreme caution in preventing treated seed from being mixed with grain intended for human or livestock consumption.

The organic mercury fungicides and insecticides usually used to treat seed are extremely poisonous even in small amounts, and accumulate in the body, warns W. P. Campbell, fungicide officer with the Canada Department of Agriculture.

The main source of possible contamination is from mixing treated seed with grain that is to be marketed. It is unlawful to offer this poisonous seed for sale except for seed, and the Board of Grain Commissioners is intent on prosecuting offenders and dealing severely with them, says Mr. Campbell.

Another source of contamination is through the grain auger, when used for handling treated grain. The auger becomes coated on the inside with the chemical, and since these chemicals are almost insoluble they are difficult to wash off.

When the same auger is used for the untreated grain the kernels of the first few bushels rub off the chemical, collecting a dressing almost the same as regular treatment.

To avoid the risk of contaminating grain it is necessary to have a second one for use in treating grain only. This applies to those having their seed treated at commercial plants as well as those who have their own seed treating equipment. The use of a second auger will reduce the risk to health and also the possibility of having a load condemned through contamination.

A third source of contamination is found in small amounts of treated seed being left on granary floors and in grain boxes. A thorough clean-up job is necessary after seeding time and unused treated seed should be safely stored for the following year.

## Weed-Free Seed

THE best start to a weed control program is to have weed-free seed. Use proper cleaning equipment or cleaning plants for processing seed grain, advises R. E. Laurin of the Melfort Experimental Farm, Sask.

Country elevators were not intended to be seed cleaning plants. Their equipment is designed to reduce dockage and not for complete weed seed removal. As a result, it is often found that grain cleaned at elevators may contain species of weed that were not even in the original grain.

## Use for Muck Soils

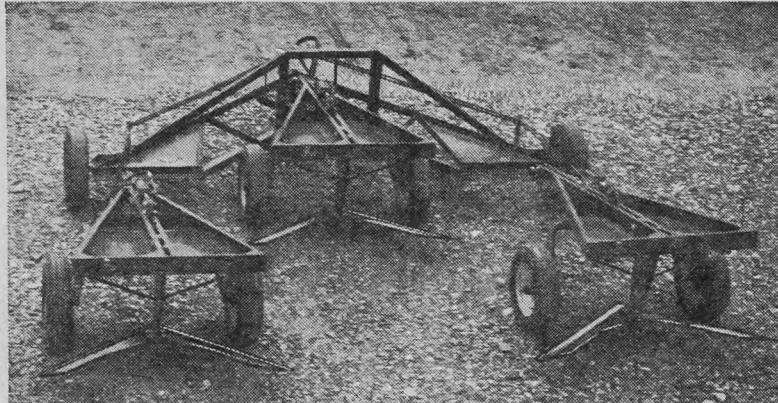
MUCK soils, also known as organic soils, are suitable for a wider range of crops than is generally believed. E. F. Maas of the Saanichton Experimental Farm, B.C., points out that muck soils are easily cultivated, they assist the penetration of roots, and yield readily to expanding tubers or root crops.

The keys to success are drainage, land preparation, weed control, and fertilizers.

## Better for String

TO prevent strings from rotting on bales at the bottom of the stack, place the first layer of bales on edge, advises Ernest Aussant of Gravelbourg, Sask.

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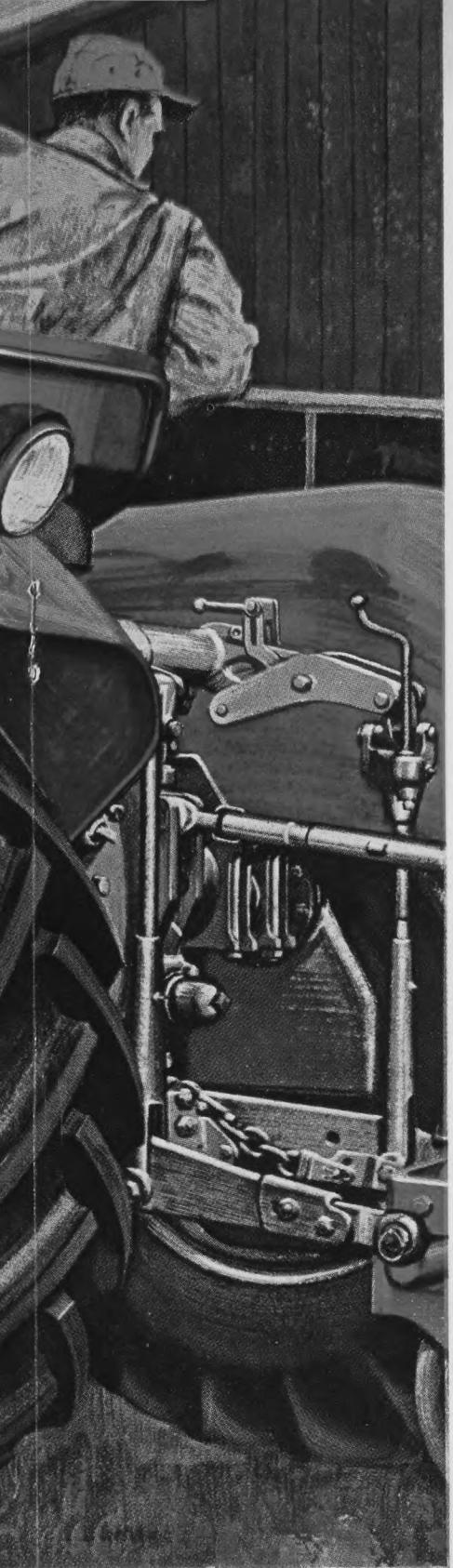
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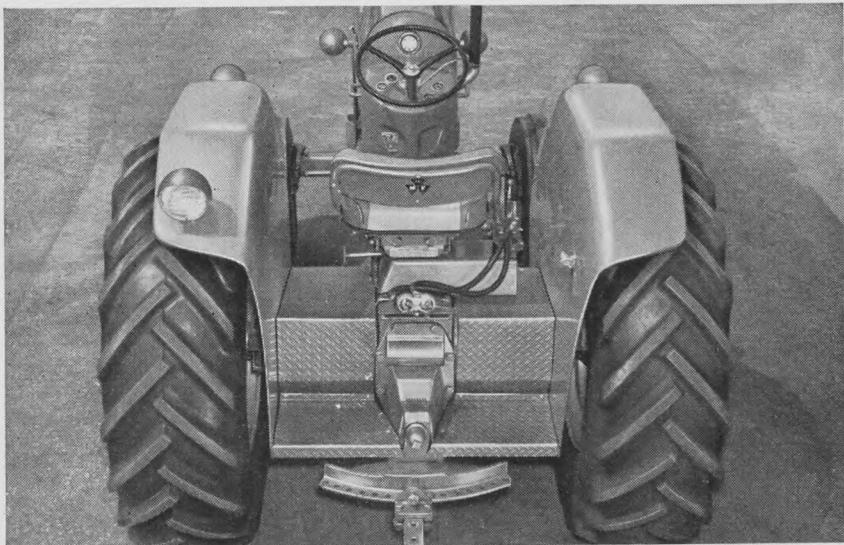
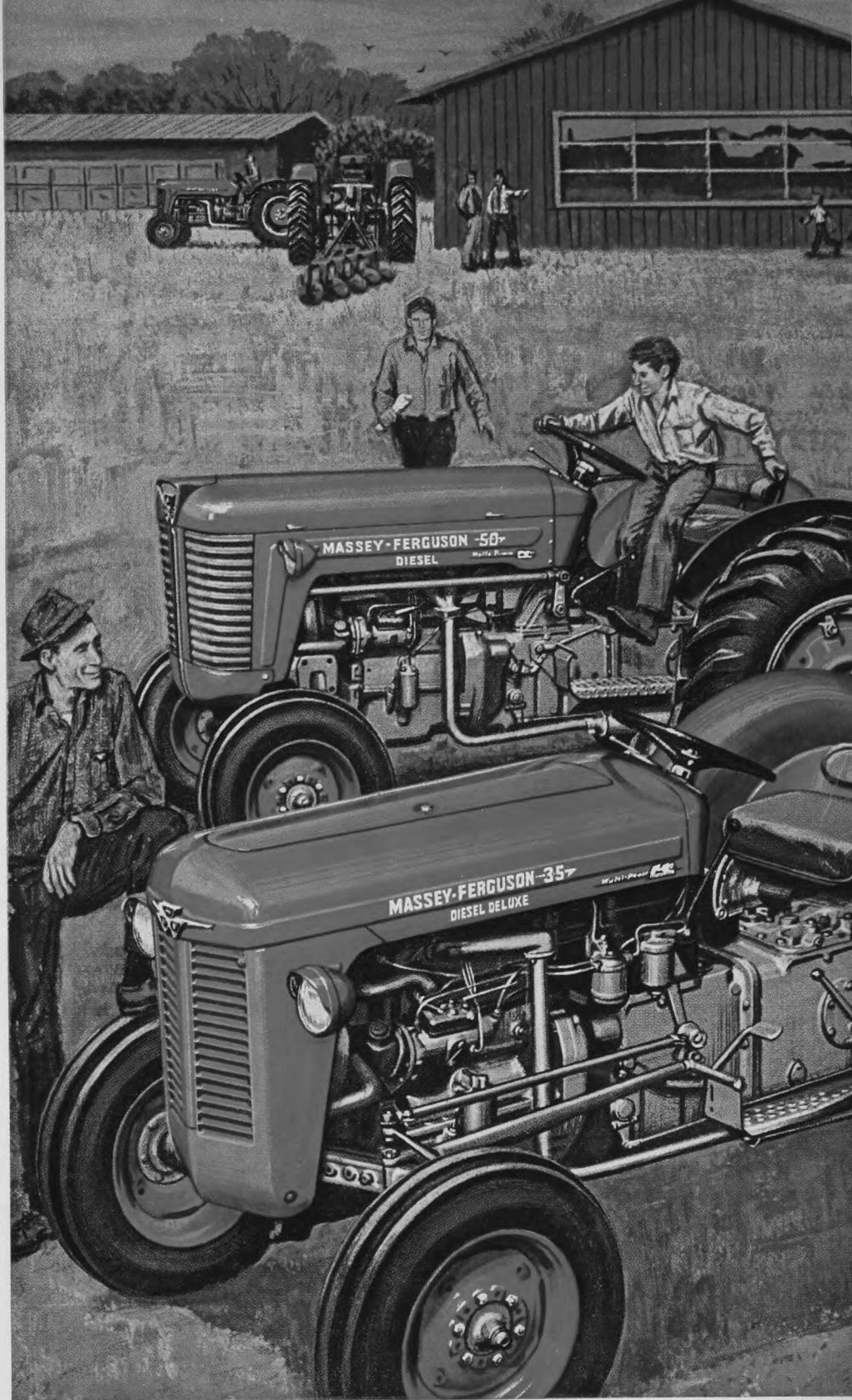
Your M-F Dealer stands ready any time to show you how these fuel-saving diesels pay off your investment faster. Now all 4 models available with exclusive Multi-Power on-the-go shift!

**4-Plow MF 65 Diesematic** (far left). In official tests, scored an exceptional average of 13.52 HP-hours per U.S. gallon, or 16.22 HP-hours per Imp. gallon. Standard equipment: 203.5 cu. in. diesel power plant with direct injection combustion, the most efficient diesel combustion system known. Multi-Power on-the-go shift. Differential Lock. Power Steering. Float-O-Matic Seat. Ferguson System. Variable Drive PTO. 2-Stage Clutching. Power Adjusted Wheels. And more . . . all price-included. 4 front end styles. Gas models also available.

**5-Plow Super 90 Diesel** (left). In official tests, scored an outstanding average of 12.65 HP-hours per U.S. gallon, or 15.18 HP-hours per Imp. gallon. Standard equipment: Big 302.2 cu. in. diesel power plant with direct injection combustion, the most efficient diesel combustion system known. Power Steering. Float-O-Matic Seat. Ferguson System. Variable Drive PTO. 2-Stage Clutching. Power Adjusted Wheels. All price-included. Optional: Multi-Power, Differential Lock. 4 front end styles. Gas models also available.

**3-Plow MF 35 Diesel** (right, foreground). World's best selling tractor! In official tests, scored an average of 13.36 HP-hours per U.S. gallon, or 16.03 HP-hours per Imp. gallon. Standard front. Gas models too.

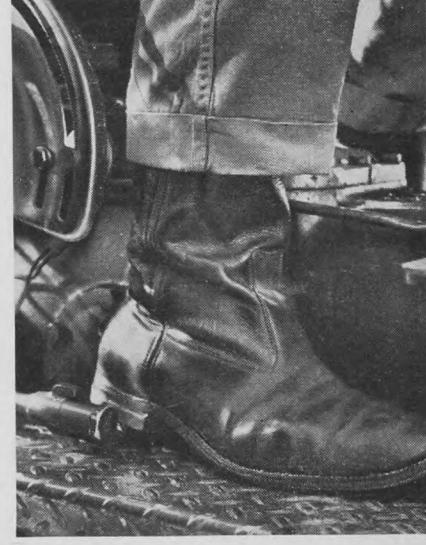
**3-Plow MF 50 Diesel** (right, background). In official tests, scored an exceptional average of 13.44 HP-hours per U.S. gallon, or 16.13 HP-hours per Imp. gallon. Float-O-Matic Comfort Seat. Gas model in 4 front end styles. Standard equipment on MF 35 and 50: Ferguson System. Variable Drive PTO. 2-Stage Clutching. Optional: Multi-Power. Differential Lock. Power Steering. Power-Adjusted Wheels.



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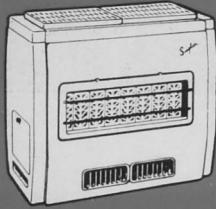
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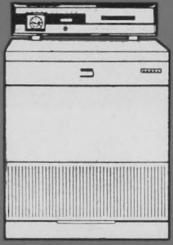
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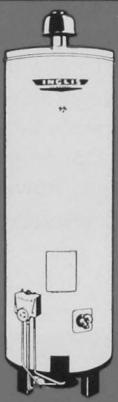
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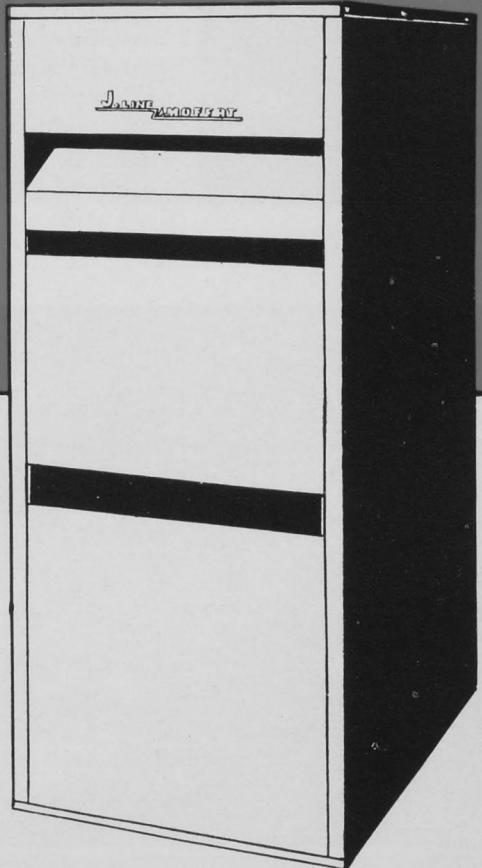
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## New Hybrids Hold the Key to Corn Production

*Corn silage has been on the upswing in recent years, but some feeders are having second thoughts*

THE frontiers of corn production are rolling back all the time with the development of new hybrids, says Dr. D. B. Wilson, of the Lethbridge Research Station.

"Although the southern Alberta season is too short for ear corn, good corn silage can be produced in this area if proper attention is given to the following points:

- Ensile when kernels are well dented and at the medium-dough stage. 'Doughy' corn has a moisture content of 70 per cent).
- Be careful to select a hybrid that will reach maturity. A hybrid will need about 14 days more to reach maturity in southern Alberta than in the established corn growing areas.
- Apply both nitrogen and phosphorous fertilizer in a formula such as 27-14-0. The amount needed will range up to 200 lb. or more per acre on irrigated land, particularly on sandy soils.
- Aim for 14,000 to 15,000 plants per acre, although row spacing can be adjusted to accommodate available machinery. A suitable planting plan would be 3-foot rows with plants 12" apart, 22-inch rows with plants 19" apart. This will require about 10 lb. of seed per acre.
- Seed from May 15 to June 1, and plan to harvest in early September.

"Tests at the station in 1962 indicated that plant populations of 20,000 plants per acre will give higher yields than 15,000 plants per acre. In 36-inch rows this would mean plants that would be spaced 8" to 9" apart. There is also good evidence that the popular 22-inch row spacing won't give as high yields as will 36" or 42" spacings.

"The short season in 1962 emphasized the importance of choosing a hybrid early enough for the district. The late hybrids didn't give a greater yield of dry matter than the earlier ones, and the quality of the silage made from them would undoubtedly be inferior. Up to 20 tons of silage per acre was harvested.

"Overall moisture should be about 70 per cent at maturity on a good corn hybrid. Like people, corn that is wet behind the ears, lacks maturity.

"Farmers in this area may find they have to pay more for their corn seed this year than they did in 1962."

ALTHOUGH sweet corn has been grown in southern Alberta for a long time, practically nobody grew field corn to feed cattle until the last 2 or 3 years. Now there appears to be a corn silage "boom" in many areas, with about 100

farmers around Taber growing and feeding it. Most claim they are getting more feed per acre, and that their cows do well on it. Some claim it is less work to harvest and easier to feed. Brothers Roy and Frank Kemper of Cranford say they put up 40 acres of corn in 4 days last year, and it provided enough winter feed for 100 breeding cows. But there are also some signs that the corn "boom" may be slackening off.

John Pahara, who always investigates a thing thoroughly before jumping into it, has been around asking a few corn growers in the Lethbridge-Coaldale area how they made out. Robert Harris, who farms in partnership with his father, wants to quit corn silage and go back to an oat-pea mixture.

Said Bob. "Sure we get twice the tonnage, but only half the food value. Anyway, you have to treat corn as a row crop and cultivate it often. The harvest comes late and at an awkward time."

Alton Knapp, Coaldale, is an old hand at feeding silage. He has tried just about everything. "When you use an oat-pea mixture you get it off the land early and get the weeds with it," said Alton. "Corn gives you a weed problem."

John Thiessen, in the same area, appears to be satisfied with his corn silage. He obtained about 800 tons of silage from 45 acres. He has it stored in two 32' x 56' x 8' plywood-lined bunker silos, equipped with self-feeder gates.

Don Porter, who farms at Fincastle, just east of Taber, has a 30-cow dairy herd and a beef cattle feedlot. He feeds 15 lb. of corn silage, 15 lb. of cull potatoes, 10 lb. of rolled barley and 2 lb. chopped hay per head per day to his feeders and appears satisfied with results.

However, corn men in southern Alberta would like to see an earlier variety developed for their area be-



At J. Thiessen farm two 32' x 56' x 8' bunker silos are filled from 45 acres of field corn for winter feed.

cause their growing season isn't quite long enough for field corn, even when the latter is to be used as silage.

Some early varieties now being tested are Warwick 263, Falconer and Morden 88.—C.V.F. ✓

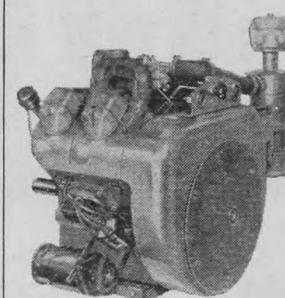
### Cost of Weeds

THE average loss in yield from weed competition in 142 farm grain fields amounted to \$5.50 per acre, according to a 3-year study made by the University of Manitoba. It was also found that two-thirds of this loss could be avoided by spraying with 2,4-D or MCPA at the correct rate and the proper time. ✓

### Care of Shelterbelts

MAKE it an annual habit to cultivate, prune, and replace trees in shelterbelts, says R. H. Rollins of the Indian Head Forest Nursery Station. It's also a good idea to cultivate a strip around the windbreak every year to block the advance of grass and weeds, to store moisture in the soil, and to act as a firebreak.

Gaps in both old and new wind-breaks should be replanted as soon as possible, with the idea of discouraging invasions of grass and weeds. The replacements should be quick-growing and able to compete with the older trees, as well as to withstand partial shade. ✓



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## How Much Water for Irrigation?

WITH most crops and soils a 2 in. to 4 in. application of water will fill the soil, say irrigation specialists at Washington State University. The exact amount to apply will chiefly depend on the water-holding capacity of your land. Other points to consider are: (1) the amount of water that has been used since last irrigation, (2) the amount of run-off, and (3) how evenly the water is distributed.

Apply all the water your soil will hold, but *no more*. If you put on too much, you raise the water table and leach your soil of plant nutrients, particularly nitrogen.

Here's how to figure how much water you're applying at each irrigation:

$$\frac{\text{cu. ft. per sec.} \times \text{hrs.}}{\text{number of acres}} = \text{acre inches (in. per acre)}$$

Example:

$$\frac{2 \text{ cu. ft./sec.} \times 12 \text{ hr.}}{4 \text{ acres}} = 6 \text{ acre inches}$$

This formula can be used for both surface and sprinkler irrigation. If the flow is rated in gallons per minute, convert it to cubic feet per second (450 gal. per min. = 1 cu. ft. per sec.). Or, for sprinkler irrigation only, you can use the following formula:

$$\text{gals. per min. per sprinkler} \times 96.3 \times \text{hours} \div \text{distance (ft.) between sprinklers} \times \text{distance between laterals} = \text{acre inches}$$

Example:

$$\frac{8 \text{ gal./min.} \times 96.3 \times 12 \text{ hr.}}{40 \text{ ft.} \times 60 \text{ ft.}} = 3.8 \text{ acre inches}$$

In experiments with over-irrigated sugar beet crops, it was found that

leaching caused losses of \$20 to \$130 an acre in reduced yields. On an average-textured soil, each inch of water you apply in excess of plant needs will raise the water table 1 foot. A high water table may limit rooting depth, or encourage saline conditions.—C.V.F. ✓

### Rust-Resistant Barley Paid Off

STEM rust made a big difference to barley yields at the Brandon Experimental Farm, Man., last season. The difference, of course, was in favor of the rust-resistant varieties.

W. H. Johnston says that rust-resistant Keystone was top with 94 bushels per acre, and the susceptible OAC 21 was lowest with 48 bushels. Parkland, also resistant, yielded 91 bushels, compared with 64 bushels for susceptible Montcalm. Other rust-resistant varieties were: Jubilee, 91 bushels; Traill, 90, and Husky, 86.

The two-rowed varieties Betzes

and Herta had only slight stem-rust infections and yielded 79 and 78 bushels respectively. ✓

### Eat More When It's Dry

**I**f fed and watered well, grasshoppers chose a drier atmosphere; if starved for 2 or 3 days, they chose a moister atmosphere. From a test with clear-winged and 2-striped grasshoppers, which were given a choice of relative humidity, Dr. P. W. Riegert of the Saskatoon Research Station draws the conclusion that they do more damage in a dry summer than in a wet one.

Dr. Riegert explains that grasshoppers, after molting, are left with a skin that is very permeable until it hardens. Water readily passes out of the insect and is evaporated. To counter this loss of moisture, the grasshopper seeks a moist environment, or eats more, so as to take in as much water as possible from plant material. ✓



**back for another Big Season!**

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dealer the business

(alias "rootrot, seedling blight and wireworm smashers")

Here's real down-to-earth drama and *you are there*: right on your own farm protected by Western Canada's leading team of disease fighters: Niagara Freddie and "The Three Smutketeers"...two-fisted Gallodual, plus Gallotox and hard-hitting Heptadrin! The story to date? Nothing short of "sensational." Last year, record sales by all three of Niagara's famous liquid protectants and enthusiastic "fan mail" from farmers across the prairies! And now they're back: • dual-purpose Gallodual for smuts, rootrots and seedling blights and complete control of wireworms • field-proven Gallotox for rootrots, seedling blights and smuts • Heptadrin combining two most powerful wireworm chemicals in one entirely new high-concentrate formula. And don't forget: Niagara's "stick-to-the-grain" chemicals *protect you too*. They don't give off poisonous mercury fumes. They're faster to use and save time: you can treat and sow immediately (no contaminated grain left on the farm). Alternatively you can treat and store for an entire year. Dosage and cost are low, control is high. Niagara chemicals are the best "crop insurance" you can buy. Give your Niagara dealer the business—and check his "secret weapon," Niagara's on-the-farm seed treater! Eyes right!

#### LOOK AT THESE PRICES!

• Gallodual 2.5c per bu. • Gallotox 5.5c • Heptadrin 14.5c

**NIAGARA BRAND CHEMICALS**

REGINA, SASKATCHEWAN

## Simple Forage Mixtures Best



Langille holds a simple mixture of Vernal alfalfa and Saratoga brome.

**T**HE old "shotgun" mixtures of grasses and legumes, which have been popular for years for seeding down hay and pasture fields, are falling from favor. The reason, according to forage crops specialist Jim Langille of the Nappan Experimental Farm, N.S., is that simple mixtures, containing only one or two species, will give better results.

In his field trials, Langille found that a simple mixture of Vernal alfalfa and Saratoga brome gave slightly higher yields than the old standby mixture of alfalfa, red clover, timothy and ladino. There is another reason for recommending the simple mixture.

Says Langille: "Simple mixtures can be so managed that alfalfa, which is a high yielding plant anyway, can make an even stronger re-growth."

The brome-alfalfa stand pictured was seeded in 1961 without a nurse crop, and clipped off later that summer.

mer. In 1962, it yielded very well. Such a stand, fertilized with 500 lb. of 0-20-20, produces over 4 tons of hay to the acre at Nappan.—D.R.B.

V

### Seed Potato Drive Planned

**T**HE Ontario Seed Potato Committee has established a project aimed at doubling the number of Ontario seed potato growers as well as increasing the acreage devoted to seed potato production in 1963.

Only 769 acres passed field standards for seed last year, while domestic production accounted for only 14 per cent of the potatoes used in the province.

Inspection services are free and application forms with further particulars, and lists of available seed are obtainable from local agricultural representatives, seed potato certification officials at Barrie, Guelph, Ottawa and London, or from the Farm Products section of the Marketing Service, Toronto. V

### Russell Had the Edge

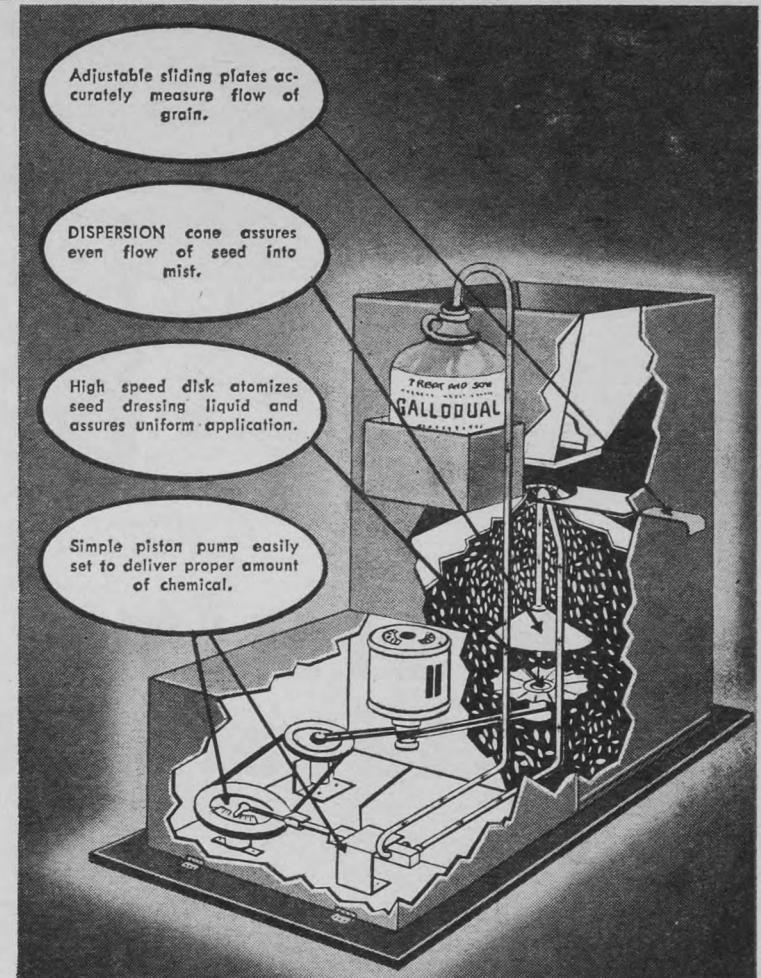
**R**USSELL oats outyielded Garry in several zones of Ontario last season, and equalled Garry in two others. Garry was the heavier yielder in zone 8 of northern Ontario. Average yields in tests for the whole province indicated an advantage of 5 per cent in Russell's yield over Garry.

Trials carried out by the Ontario Agricultural College indicate that Russell oats has some resistance to blackstem, which makes it stand up better in years when the disease is prevalent. Resistance to rust is about equal to Garry's. Both mature earlier than Rodney.

V

smoothed off with tillage machinery. Grass seeding was the last operation.

The purpose of this project is to provide a grass-covered water course for surplus water that may flow through the culverts in the future. Time will measure its effectiveness. V



### HERE'S NIAGARA'S SECRET WEAPON!

(an on-the-farm seed treater that costs only \$98.50\*)

It's Niagara's Niamist 200 — first on-the-farm liquid seed treater. Here's a machine as precise as any expensive and elaborate seed plant equipment — yet built for low-cost on-the-farm use. The Niamist 200 accurately controls the flow of seed and Niagara liquid seed dressing. A piston pump meters liquid onto a high speed disk which immediately converts it into a fine penetrating mist. Each seed is treated individually as it drops through the mist. Guess work is eliminated. Every seed gets the right amount of chemical — no overdosed or untreated kernels. You'll get ideal germination rates with Niagara's Niamist.

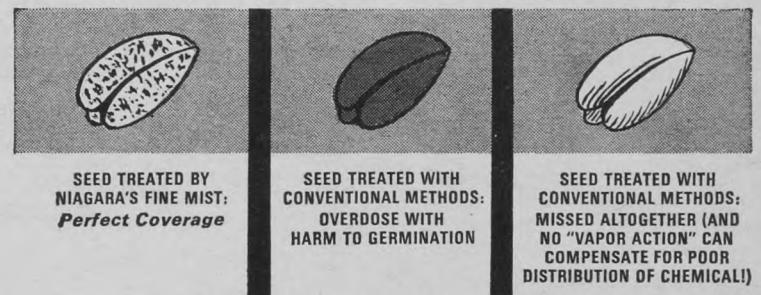
#### Assure yourself of the best:

use Niagara's safer liquid seed dressings (Gallotox, Heptadrin, and Gallodual) with Niagara's Niamist 200.

**Niagara**

\*Electric Motor \$21.00 extra

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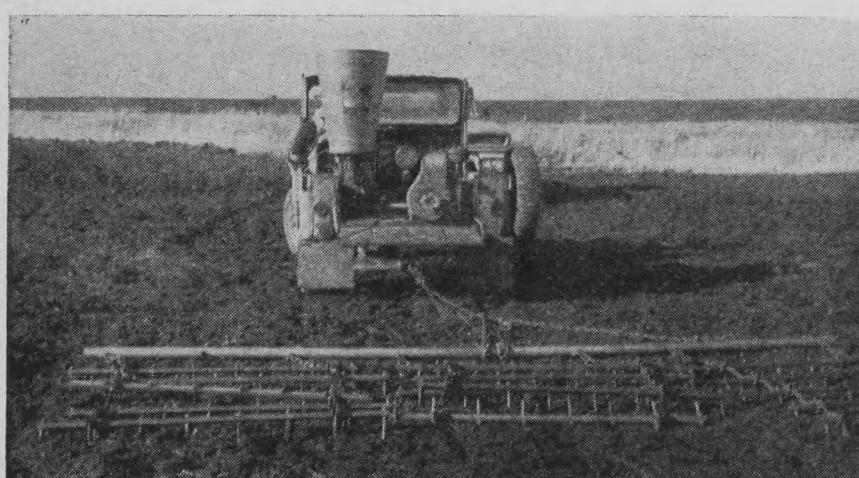
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PROVINCE \_\_\_\_\_

NIAMIST 200  
TREATS EVERY  
SEED RIGHT  
63N1



Sprayer-type machine is mounted on a jeep, which also pulls the harrows.

## Another Way to Seed Grass

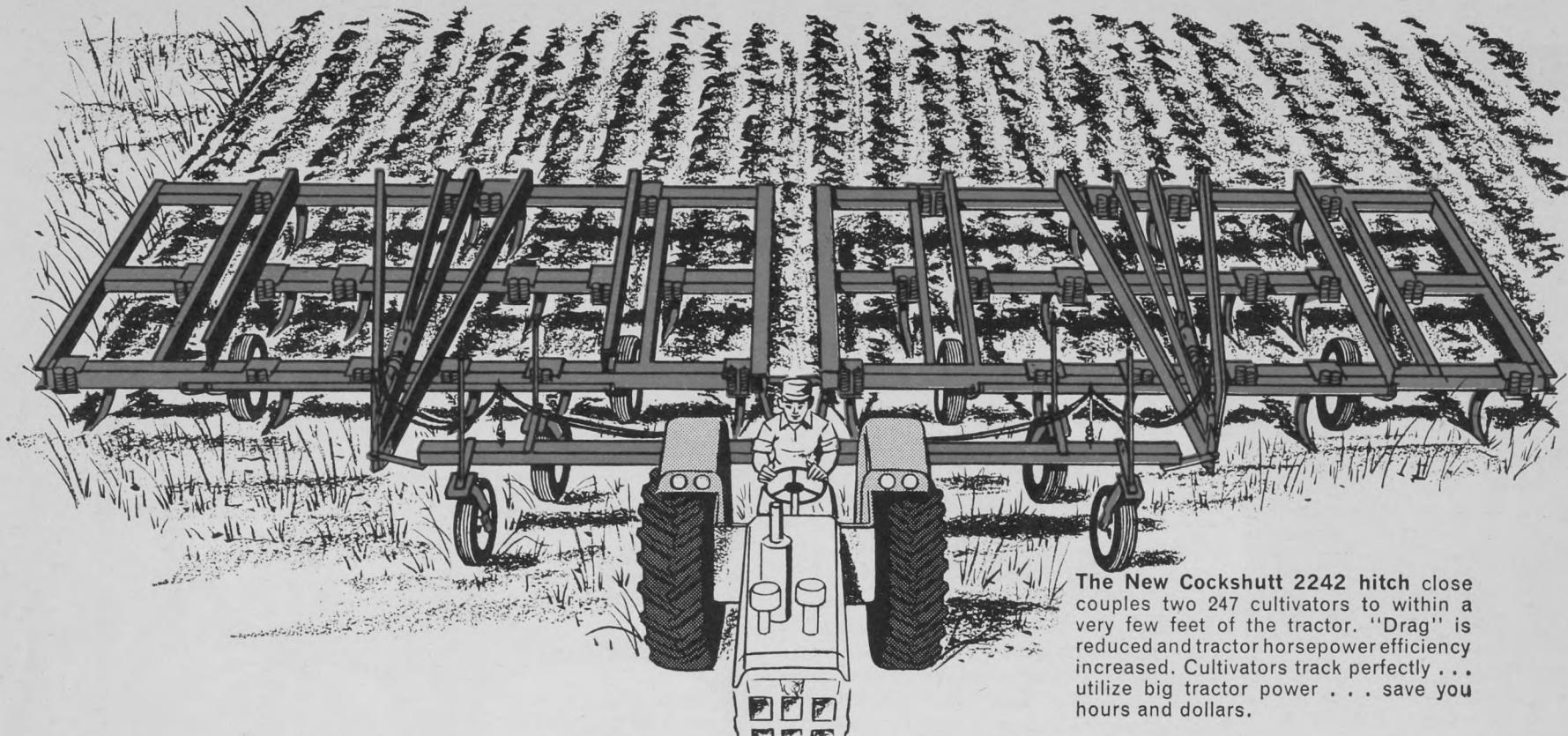
by G. W. ROBERTSON

**A**s roadbuilders, municipalities have to find ways of seeding grass along the ditches of the roads they build, and this is of interest to farmers, too. The kinds of machinery used for such seeding vary enormously. Once the machinery is in operation, however, it is

likely to be found useful for many jobs other than roadside seeding.

The seeder, used for roadsides by Starland Municipality, Alta., is a sprayer type of machine powered with a much-used, air-cooled motor. The jeep, on which all the equipment is mounted, is easily able to pull three sections of harrow which give the scattered seed a light covering of earth.

The project shown in the photograph was tackled by the service board of the municipality. It is one



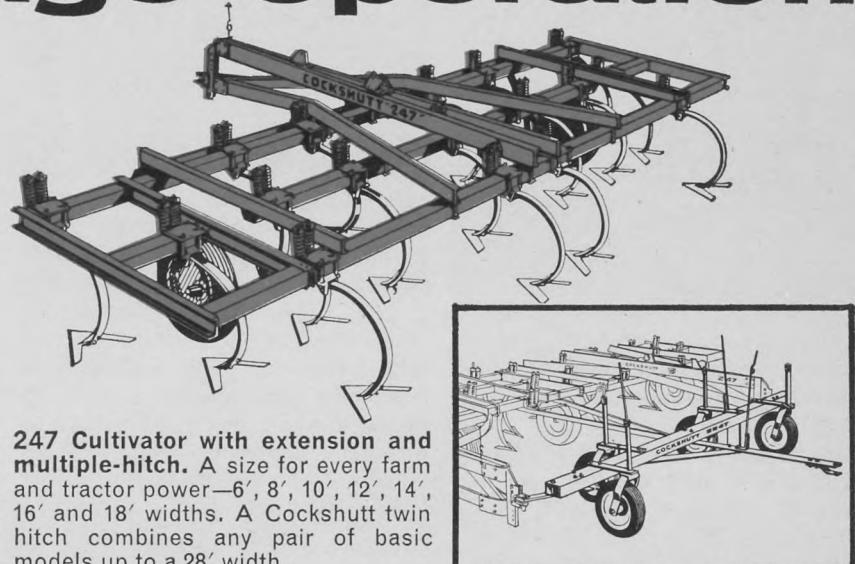
The New Cockshutt 2242 hitch close couples two 247 cultivators to within a very few feet of the tractor. "Drag" is reduced and tractor horsepower efficiency increased. Cultivators track perfectly . . . utilize big tractor power . . . save you hours and dollars.

## COCKSHUTT for bigger, faster tillage operation

**Cockshutt 247 Heavy-Duty Cultivator . . . plows, cultivates . . . fits your tractor power.** Designed to conserve moisture, to prevent erosion and topsoil loss, the Cockshutt 247 Deep Tillage Cultivator has never been equalled. Because all three basic models, (6', 10' and 14') can be extended by using 1' and 2' frame-end extensions, it can be matched in minutes to varying soil conditions and tractor power. And, now it can be twin-hitched up to 28-feet wide to provide maximum utilization of big-tractor power.

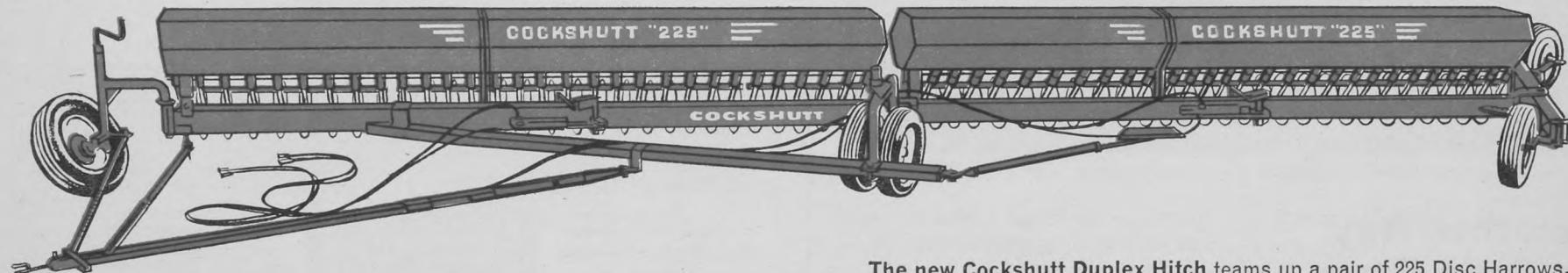
Worked deep, 2" reversible chisels crack and rip through hardpan formations. Worked shallow, 16" sweeps cut off weeds and stubble at the roots leaving moisture conserving stubble mat. The 247's rugged box frame, steel rockshaft, cantilever wheel suspension and spring mounted shanks are built rugged for the roughest tillage jobs. It is balanced for one-hand, one-man hitching.

**Cockshutt 225 Disc Harrow cultivates, seeds, packs . . . in one operation.** Meet the perfect working-partner to the deep-tillage cultivator . . . the Cockshutt 225. Flexible mounted disc gangs leave the ground level, reduce weed problems and soil drifting, and prepare seed beds or summer fallow with new economy in time and labour.



**247 Cultivator with extension and multiple-hitch.** A size for every farm and tractor power—6', 8', 10', 12', 14', 16' and 18' widths. A Cockshutt twin hitch combines any pair of basic models up to a 28' width.

Simple to operate and adjust, the 225 turns to left or right with equal ease . . . narrows down to 9 feet for fast, easy transportation. Two-speed seeding attachment, optional. Available in 9', 12', 15' or 18' sizes with hydraulic or mechanical controls and a choice of 18" or 20" diameter discs. Can be duplex-hitched up to 30' widths.



The new Cockshutt Duplex Hitch teams up a pair of 225 Disc Harrows.



**COCKSHUTT**  
FARM EQUIPMENT OF CANADA LIMITED Brantford, Ontario

# horticulture

## Venture Is Useful Tomato

A NEW tomato variety that is suitable for the early market, but not for staking has been tested at the Vineland Horticultural Experiment Station, Ont. Known as Venture, the variety is a small compact, determinate plant-type and is very early. It has only a moderate amount of foliage, and is similar in size and plant-type to Fireball.

Venture's fruit is medium-sized, slightly smaller than Fireball, averaging just under 3½ oz. in trials. The fruit size is very uniform, slightly flattened, with excellent external color and fair interior color. Fruit cracking is less severe than in many other varieties, but can be troublesome in unfavorable weather. Normally, there are few blemishes or misshapen fruit.

In Vineland trials, Venture has been the earliest dwarf variety with acceptable horticultural characteristics. In most seasons, it came into production at about the same time as Harkness and Vogue, the staked varieties. This, together with the good appearance of the fruit, is the main reason for its introduction. Yields of early fruit have been high, but total yields have been about the same or less than Fireball.

Venture should be grown in the same way as Fireball, on account of its earliness and sparse foliage. Plants should be 8 weeks old for planting, when there should be no fruit or even open flowers on the plants. Because of sparse foliage, follow a careful spray program to control early blight. Heavy fertilizing, particularly with nitrogen, is necessary for adequate growth.

Small test packets of seed are available to growers on request. Some seed will be available commercially this year, and larger quantities in 1964. V

## Raising Rhododendrons

MOST plants don't like it, but acid soil is fine for a healthy bed of rhododendrons. They also like partial shade, fertilizer, mulch, and a sheltered spot if winds are strong.

G. S. Swain of the Kentville Research Station, N.S., says that rhododendrons prefer a moist, well-drained acid soil with a fairly high content of organic matter. A good mulch for them is 3 inches of pine needles, oak leaves or wood chips, which should be renewed every 2 or 3 years. Avoid mulches that dry out.

Protect newly-planted rhododendrons during their first winter, using a tepee shelter of small spruce trees or branches, with the pointed ends

pushed into the ground and the tips lashed together. Use the tepee from shortly before freeze-up to after the spring thaw.

A small amount of fertilizer, applied annually, will help to keep the plants healthy. There are special rhododendron fertilizers, but a reliable substitute is one part by volume of potassium nitrate with two parts of superphosphate. One cupful of this mixture is sufficient for a plant that is 3 feet tall. It is applied at Kentville on top of the mulch in early spring before growth starts. V

## Stacking Pipes



MOUNT an old ladder horizontally against a building, and support the ladder with braces to make it into a rack. The spaces between the rungs provide an excellent means of stacking irrigation and other kinds of pipe so that the various sizes are kept separate.—H.M. V

## An Early Sweet Corn

AFTER showing promise in experiment station and market garden trials across Canada, a very early sweet corn known as Sunnyvee is being introduced by the Ontario Department of Agriculture. It was tested by growers for 3 years under the code number VH 601.

Sunnyvee matures about a day later than Spancross, but has much better flavor and tenderness, and is expected to replace Spancross in home gardens and in markets where eating quality is appreciated. It is a day earlier than North Star, which has been Ontario's main market sweet corn.

With exceptionally deep kernels for such an early variety, Sunnyvee is also tender and sweet, and keeps satisfactory eating quality for a longer period than most early varieties.

Sunnyvee is mostly 12-rowed, with slightly less 8 and 10 rows than are found in Spancross or North Star. Ears have averaged 7½ inches long, with well-filled tips and straight

*Star of the NORTH!*



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STATE OF MINNESOTA DEPT. OF AGRICULTURE  
SEED POTATO CERTIFICATION

620-CG STATE OFFICE BLDG., ST. PAUL 1, MINN.

## MUSHROOMS \$4.50

\$4.50 lb. for dried mushrooms. More growers wanted. Everything supplied.

Dehydrated Products & Chemicals  
Box 548  
Calgary, Alberta

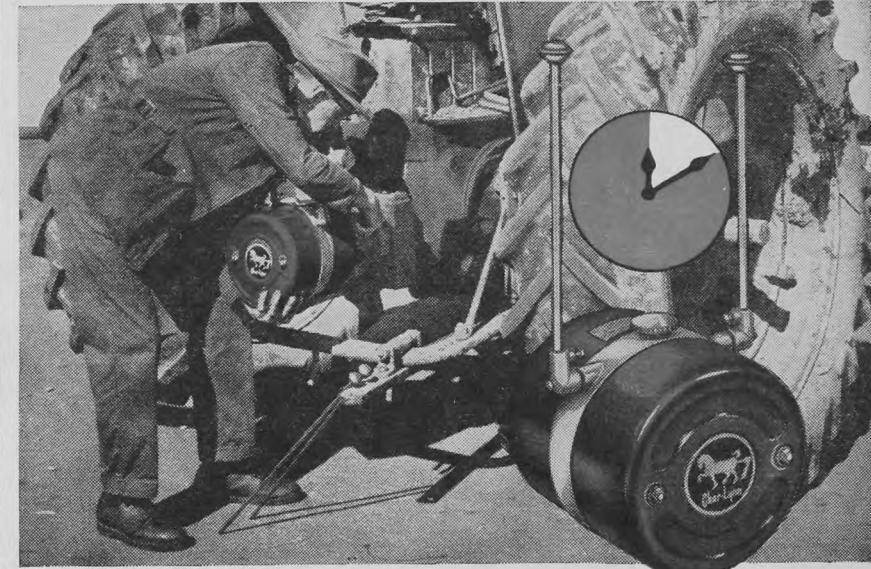
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We save you money on all types of merchandise, we list a few lines men's, boys', girls', ladies', babies' wear, overshoes, towels, bedspreads, electrical appliances, and hundreds of other lines. Send for Tweedle Money Saver.

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## Antiseptic Bath For KIDNEY and BLADDER IRRITATION

After 21 twice as many women as men are made miserable by common irritation caused by a germ, Escherichia Coli. To quickly combat the secondary aches, muscular pains and disturbed sleep caused by Kidney and Bladder irritations, try taking an internal CYSTEX antiseptic bath for a few days. All you do is take 2 little CYSTEX tablets with a glass of water. In addition to its cleaning antiseptic action, CYSTEX is also an analgesic pain reliever for Rheumatic Pains, Headache, Backache, and muscular pains. Get CYSTEX from druggist. Feel better fast.



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WITH THE HI-LO-PAC you can have Hydraulic Power for any tractor regardless of Age—Model or Make. That's right, in just 10 minutes you can double your tractor's usefulness. Here is everything in 1 package needed to operate all farm implements. Just hook it on, fill the reservoir and your "Extra Hand" is ready to go to work. No pulleys—chains—sprockets. Mounts directly to P.T.O. shaft. Operates at LOW P.T.O. speeds.

\*After Initial 10 Minute Installation  
—On or Off in 3 minutes.

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## HORTICULTURE

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This big 6 h.p. rider does 12 lawn care jobs! Mows, rolls, rakes, aerates lawns; spreads fertilizer; mulches leaves; hauls carts; plows snow. So easy to use with 4 speeds forward; reverse — fingertip controls. Makes lawn care fun!

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### Help Peas Fight Disease

PEAS need seed treatment. They succumb readily to such diseases as seed rot, seedling blight, root rot, and wilt, says Dr. F. R. Harper of the Lethbridge Research Station, Alta.

Seed rot is indicated by seeds that don't germinate, and when dug up, they are found to have decayed. Seedling blight and root rot are distinguished by a dark brown or black discoloration of the side roots and even the main root—the diseased plant will generally break away from the root when pulled gently.

If these symptoms appeared last year, treat this year's seed with Captan.

Seed treatment is of little value against wilt. The organism is carried in the soil as well as on the seed. A few resistant varieties of peas are available, but usually you can avoid repetition of the trouble by growing some other crop in the in-

# Make those improvements you've always wanted

In farming, as in any other business, the need will arise for ready cash to finance improvements to property or buildings, for the purchase of equipment, or for some other useful purpose. At such a time a *Farm Improvement Loan*, arranged through the Royal Bank, is often the simple answer. Loans are available up to \$7,500. Repayment can be arranged by convenient instal-

ments. Interest rates are low. For details ask for our booklet "Farm Improvements Loans" at any branch.



**ROYAL BANK**

RB-62-6

fected soil for the next 3 years. Wilt-ing and drying at about the time of flowering are symptoms of wilt disease. Roots often seem to be healthy, but there is a reddish brown dis-coloration of the conducting tissue in the lower stem and root area. ✓

### Canadians Will Name Rose

THE Montreal-Lakeshore Rotary Club has announced plans for the selection, by Canadians across the country, of a top-flight rose for Canada's centennial celebrations in 1967.

The idea was proposed to the Club by J. G. McIntyre, executive vice-president of the internationally famous Montreal Memorial Park.

Five rose selections will be set out in 27 test gardens—50 or more to a garden—in different communities across Canada next year. The gardens will be sponsored coast-to-coast by Rotary Clubs, municipalities and horticultural societies. They will be provided free, each community providing the garden space and caring for the test roses.

Canadians will be encouraged to visit the test garden in their area and select the numbered rose they feel would make the best "Canadian Centennial Rose." Votes will be tabulated and the variety receiving the most votes will be named.

During 1965, '66 and '67 the rose will be made available to those wishing to develop their own centennial rose garden. The Rotary Club will receive a royalty on each rose bush sold—the royalty to be used for Rotary community work.

The sponsors point out that while the test site communities have already been chosen the centennial rose committee will consider additional sites. Interested communities, societies and individuals can obtain further information by contacting the Centennial Rose Committee, P.O. Box 1967, St. Laurent Postal Station, Montreal 9, Quebec. ✓

### Picking with Both Hands

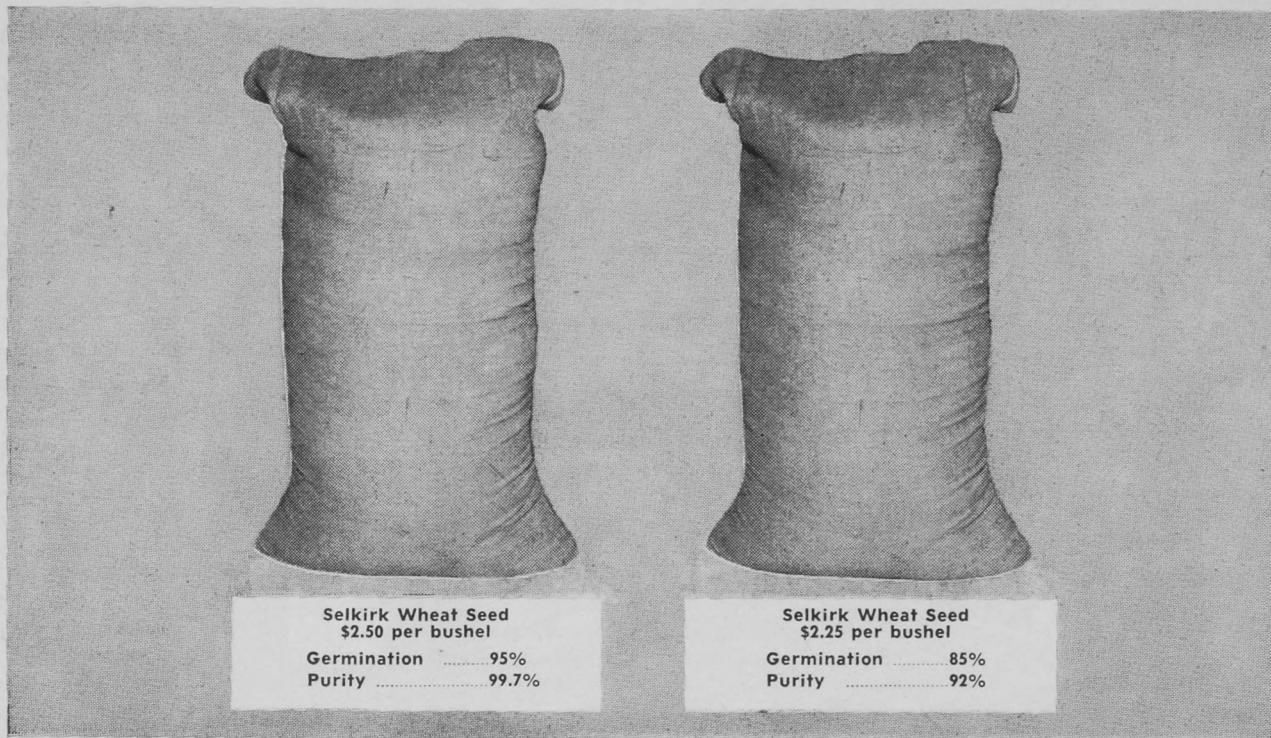
FTER testing four ways of picking fruit, it was found that the best method was to use both hands alternately. The experiment at the National Institute of Agricultural Engineering in England tested the following methods: one hand only, one hand picking and one receiving, both hands picking simultaneously, and both hands picking alternately.

The fourth method was the most productive and gave the best picking performance, largely because it required less concentration than the next best method, which was with both hands picking at once.

When fruit pickers used one hand only, they reached only 40 per cent of their potential output. When the second hand was used for receiving fruit, only 50 per cent of the potential was reached.

Other tests at the Institute showed that the most effective containers were those slung on a shoulder harness and held in front of the body. They should hold 26 to 28 lb. of fruit. ✓

# New U.G.G. Pure Live Seed Formula Saves You Money on Seed



## (PROBLEM — WHICH SEED COSTS LESS?)

### ANSWER

You may be surprised, but the seed on the left costs less. The U.G.G. Pure Live Seed Formula will show you the true price of seed before you buy.

This is the Formula:

$$\frac{\text{Asking Price}}{\text{Purity} \times \text{Germination}} = \frac{\text{Price of Pure}}{\text{Live Seed}}$$

Here is how it works on the problem above:

If Registered No. 1 or No. 2 Selkirk seed wheat from United Grain Growers costs \$2.50 a bushel, and unsealed field-run Selkirk costs \$2.25, you seem to be saving 25 cents a bushel with field-run seed. But are you?

U.G.G. seed wheat is guaranteed 99.7% pure; on field-run Selkirk, the pure seed is often as low as 92%. U.G.G. seed wheat has a germination value of at least 95%; field-run seed wheat often slips to only 85% germination. Now let's compare Pure Live Seed prices:

$$\frac{\text{U.G.G. Selkirk Costs}}{.997 \times .95} = \$2.64 \quad \begin{matrix} \text{per bushel} \\ \text{of Pure} \\ \text{Live Seed} \end{matrix}$$

$$\frac{\text{Field-run Selkirk Costs}}{.92 \times .85} = \$2.88 \quad \begin{matrix} \text{per bushel} \\ \text{of Pure} \\ \text{Live Seed} \end{matrix}$$

So, on the basis of Pure Live Seed, a bushel of U.G.G. seed actually costs 24 cents less.

Forage seed from United Grain Growers costs less too. With a sharp pencil and the U.G.G. Pure Live Seed Formula, you can save money on all your seed!

The U.G.G. Pure Live Seed Formula is especially important this year: last fall's frosts and poor weather killed a lot of seed. You might pay highly for the hidden cost of "bargain seed" that hasn't been tested for germination.

Your U.G.G. agent has a complete catalogue of cereal and forage seed, and your only true bargain . . . more **Pure Live Seed** for your money.

THE FARMERS' COMPANY





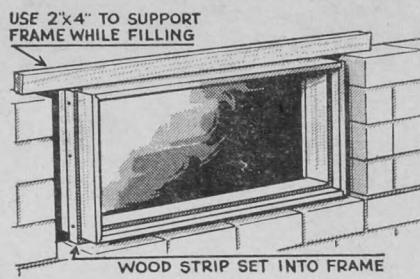
# WORKSHOP

## Draft-Proof Windows

When building with cindercrete or concrete blocks it is often difficult to get an effective seal between door and window frames with the blocks. To overcome this and have a tight joint, stop the blockwork about 6

inches short of the actual size of the opening. Gouge out around the center line of window frames at sides and bottom and at sides and top of door frames, making the cut about 1 inch wide and  $\frac{1}{2}$  inch deep. Insert a strip of lumber in the recess

making sure it is tight and that half of its width projects. Nail it in place. Tack a length of 2" x 4" lumber to



the top of the frame, lay the 2" x 4" across the window opening in the basement wall and center the win-

## Centering Guide

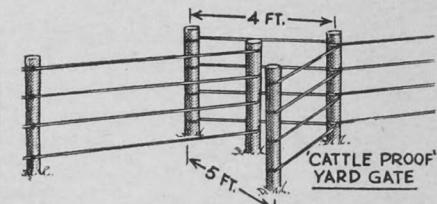
Sometimes ripping a board in half can be a problem especially when it is an odd size, say  $7\frac{5}{8}$ ". To overcome this take a rule and slant it across the board until the next highest digit, in **HANDY METHOD OF MARKING CENTRE OF BOARD** mark, is in line with the edge of the board. Mark the board at the 4" mark and this will give you the exact center spot.—L.S., Alta.

## Sand on Ice

Ashes sprinkled on ice make it slip-free but ashes will track all over the house. Salt will melt the ice but will ruin the concrete walk. The most satisfactory method of taking the danger out of icy walks is to heat a small pan of clean sand until it is quite hot, and then to sprinkle it lightly over the walk. The hot sand melts itself into the ice, and is frozen in, so it will stay there and not stick to your boots or blow away. Because no sand is wasted, you need only a small amount.—A.W., Alta.

## Cattle-Proof Gate

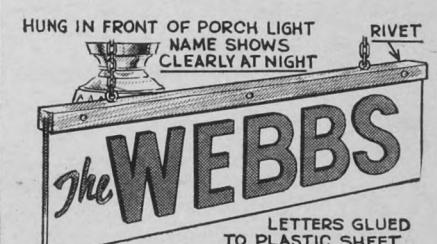
This simple inexpensive gate does not require any special hardware or fitting to construct, and allows free access to humans while at the same



time keeping livestock where they belong. Two 4-foot extensions are added at 45 degree angles where the normal gate post would be. The other end of the fence should extend to within close to 2 feet of the center of the Y shape formed by the two extensions.—M.M., Sask.

## Illuminated Sign

A self-illuminated name plate adds a modern and convenient touch to any farm home and can be of added assistance to callers. Hung in front of a porch light or set in a lighted



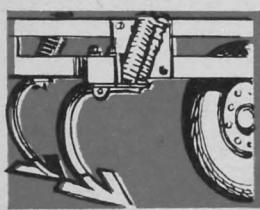
window it is easily discernible day or night. Glue the desired letters to a sheet of plastic or glass and rivet into a frame of  $\frac{3}{4}$ " x  $\frac{3}{4}$ " lumber as shown in the sketch. Clear plastic can be made translucent by sanding. If glass is used a frame should be constructed all around it. — A.W., Alta.

# NEW ROBIN

## DEEP TILLAGE CULTIVATOR

Here's the cultivator that will handle those tough tillage jobs dependably and economically year after year. Breaking up hard subsoils . . . ripping through hardpan formations . . . the new farm-proven Robin is the easiest-handling "heavy duty" you ever hitched behind a tractor. Ask your dealer for the facts on the new Robin — engineered to give you more than any deep-tillage unit in its class.

- **INDEPENDENT WHEEL ADJUSTMENT** ensures level unit at all times.
- **BALANCED DESIGN FOR EASY HITCHING** no jacks needed — and easy tractor steering.
- **LUBRICATION FITTINGS MADE OBSOLETE** by new insert-type bearings on rockshaft.
- **UNIQUE SHANK ARRANGEMENT** for free trash flow — no clogging in heavy trash.
- **ADJUSTABLE DRAWBAR BRACES** for fast, easy shank readjustment.
- **HIGH-GRADE ALLOY STEEL SHANKS** Spring-loaded 1" x 2" shanks standard.
- **ONE-PIECE WHEEL-ARMS & ROCK-SHAFT** eliminate linkage wear.



### 22" HIGH TRASH CLEARANCE —

This high under-frame clearance means efficient operation regardless of trash conditions and working depth.

12' unit with spikes

\$750

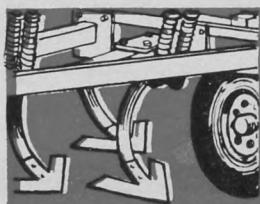
14' unit with spikes

\$850

(Less tires and tubes)

### ADD EXTRA TILLAGE CAPACITY

1' and 2' extensions — quick and easy to add or remove — make the basic 12' unit a 14' or 16' cultivator.



16' unit with spikes

\$960

# Robin-Nodwell Mfg. Ltd.

CALGARY — EDMONTON — REGINA — BURLINGTON

### Tool Tray

Here is a portable tray to have tools and spare parts handy when needed. I made it by welding discarded disc blades onto the ends of two short pieces of pipe which fit into each other. A  $\frac{5}{8}$ " hole is drilled into the side of the wider pipe and a  $\frac{1}{2}$ " nut welded over it. A  $\frac{1}{2}$ " machine bolt is inserted into the hole to serve as a setscrew. A small bar is then welded to the end of the bolt to make turning easier. The upper length of pipe is 17" and the lower section 18". A pipe stand was also made to fit the same base section by welding a half section of a 4" pipe to the 17" length of pipe. The half section in this case is 4" long.—A.C., Sask.

### Angling Metal

A length of railway steel makes a useful implement when bending strap metal. To use it effectively cut a plate about  $7\frac{3}{4}$ " x  $6\frac{1}{2}$ " x  $\frac{3}{8}$ " to shape of the rail, leaving adequate working space on the top edge. Insert the metal to be bent on top of the rail then wedge with  $\frac{3}{4}$ " or 1" wedge to hold the strap metal in place.—E.H., B.C.

### Two-Way Spray

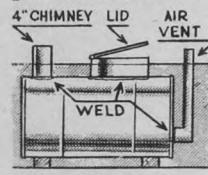
You can get the most out of your insecticide spray gun if you discharge it by hand in front of an electric fan. The fan will distribute the insecticide as a fine mist in a few moments. Be careful to avoid having the insecticide on you, particularly on your face.—H.G., N.S.

### Clean Grinding Wheel

Rub a cake of hard soap over your grinding wheel before grinding soft metals, such as copper, brass, etc. In this way, the surface of the wheel will not load up with the metal.—H.J., Pa.

### Water Heater

We have been using this idea for a stock tank water heater for the past 15 years and have found it very efficient. The heater is made out of a 10 gallon oil container with a 4" chimney set in on one side, a  $1\frac{1}{4}$ " air intake pipe welded into the other end, and a lid welded or brazed on the same side as the chimney. The intake pipe, chimney and lid should be made high enough to be above the water level in the tank. The heater is set crosswise in the tank on wooden blocks and held



MADE FROM 10 GALLON TANK

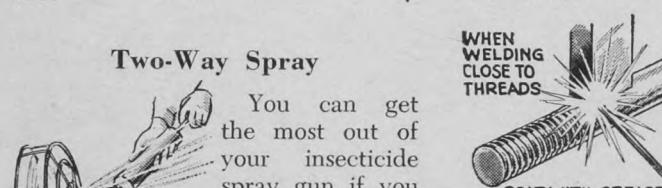
in position by braces which are lined with tin on the surface which holds down the heater. The heater is immersed to the desired depth and will burn either wood or coal. It generally lasts about four years and cost about \$2.50 to adapt.—A.B., Alta.

### Shock Absorber

Here is an idea for an easily assembled shock absorber. The body is comprised of a piece of  $1\frac{1}{4}$ " pipe, threaded at both ends and capped with conventional plumbing caps. The length of the pipe may vary depending on the length of spring to be used. The unit is assembled by inserting the draw pin through the plumbing cap into the pipe. The spring is then slipped over the pin inside the pipe and held in place by a washer and nut. The other plumbing cap is then screwed into position and welded for added strength. The added feature of this type of absorber is that the spring is compressed when the pressure is applied, instead of being stretched, and ultimately becoming weakened with prolonged use.—M.M., Sask.

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### Welding Tip

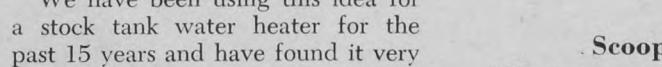
If you have to make a weld close to a thread and want to avoid spatters on the thread, coat it with grease and when you have completed the weld it is quite simple to wipe the grease and the spatters clean.—P.J.W., Alta.

✓

### Oil Heater

My waste oil heater consists of 2 feet of pipe, a tank, an old stove and a tap, (see sketch). When I start it I turn on the tap and light the stove and when it gets too hot I simply turn off the tap. It saves money for heating the garage and is one way of cleaning up my waste oil from trucks and tractors around the farm.—J.M.H., Man.

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CATS  
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# FARM BUILDINGS

## Precast Concrete Septic Tanks Available



Jack Brown, an Alberta poultryman, helps to guide his new precast septic tank from the delivery truck into position in the hole that is prepared. [Guide photo]

If you've been dreading the day when you must replace that worn-out metal septic tank, you can take heart from a new development of the concrete industry. This is a low-cost, precast concrete unit that can be installed in a single day. Whether you are making a new

ter replace his metal tank he found corrosion had eaten a big hole in one side.

"It should've been dug up long ago," he said, "our sewerage system hasn't been working properly for some time."

Bill Pratt, who raises Arabian horses near Springbank, Alta., had to replace his steel tank in only 5 years. When he opened it up he discovered about 40 per cent of the tank had been eaten away. He lost no time in replacing it with a precast concrete one. Using hydraulic digging equipment for the hole, he found it was easy to install one of these new units in a day.

Many farmers and ranchers have solved this corrosion problem by pouring their own concrete tanks. But this method needs skilled labor, good weather conditions, and more time than most farmers can spare.

Too, home-poured tanks are often prone to leak because it's hard to control thickness and quality of concrete without plant facilities. Pre-cast tanks can be completely examined for flaws before they're put in the ground.

Installation of these tanks offers few problems. Excavation diagrams that show the exact size of the hole needed are supplied by the manufacturers. Delivery is by a truck equipped with a special hoist. Freight charges include unloading of the tank right into your excavation.

Precast concrete tanks generally come in two sizes. There's a 450-gallon unit for average 3-bedroom homes, and a 750-gallon unit for motels, service stations and other commercial uses. The latter are used in batteries for larger installations. Cost of the home size is about \$240, as compared to \$150 for a somewhat smaller steel tank. But \$240 once in a lifetime is a lot cheaper than \$150 every 5 to 10 years. —C.V.F. v

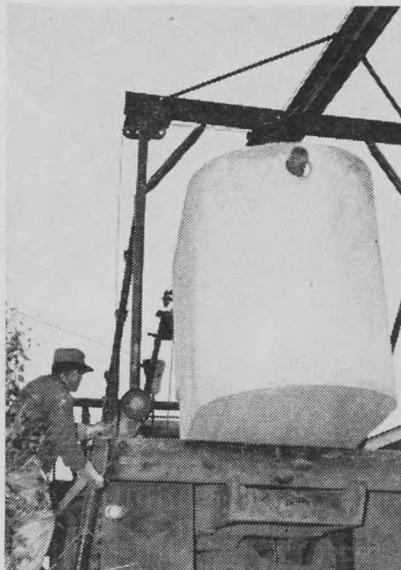
### Heat Losses Are Avoidable

YOU can cut heat losses from farm buildings by about half, if you use proper insulation. Dexter Johnson of the North Dakota Extension Service points out that saving the heat inside is needed to provide for proper ventilation of livestock buildings and to reduce the annual cost of heating the farm home.

Minimum insulation requirements for farm homes are 3½ in. in walls and 5 in. in ceilings. Dead air spaces between insulation and sheathing also add to the insulation, but they are not as effective as good fill insulation. Several air spaces are also better than one big one.

Insulation must be kept dry, which means a good vapor barrier between the warm wall surface and the insulation. Ventilation of attic space above ceiling insulation is also important. Provide at least 1 sq. ft. of gable louver area for each 300 sq. ft. of attic floor area.

Remember, too, that insulation is as effective in keeping heat out of a building in hot summer weather as it is for keeping heat in. v



Concrete tank is delivered by truck, which is equipped with special hoist. [Guide photo]

installation or a replacement, this precast tank can save you time and trouble.

Because of the powerful corrosive forces at work in sewage, a steel tank will fall apart in 5 to 10 years. Long before this happens, your wife is going to start carping about the way the system is working. A concrete tank is your best bet because a good concrete unit will last a lifetime.

When poultryman Jack Brown of DeWinton, Alta., decided he'd bet-



A concrete septic tank is set in position and ready for the excavation to be filled in. Notice the sectional concrete cover and the removable lids. [Jack De Lorme photo]

# For a High Net Return per acre ... on YOUR farm



**Good, fertile soil is the basis of all plant production. It is, perhaps, the greatest of all our natural resources—our basic source of food.**

**Good soil does not last indefinitely.** Each grain crop takes nitrogen, phosphorus and other elements from the earth—elements that are vital to plant life. Unless these are replaced, the soil becomes depleted—farmed out.

**Nitrogen and Phosphorus can be replaced.** Essential elements can be replaced through the use of chemical fertilizers—such as CO-OP Indian Brand Fertilizers.

**CO-OP Indian Brand Fertilizers**, properly applied, will generally give favorable results

on both stubble and summerfallow crops. Apart from increased yields, other noticeable effects are—rapid root development, vigorous growth, ability to compete with weeds and resistance to root rot. Also, early maturity and uniform ripening will help avoid frost hazard—and generally bring good grades of grain.

**Keep your soil fertile**—to help ensure that the good earth will provide abundantly, good soil management is essential. CO-OP fertilizers can play a vital part in successful farming.

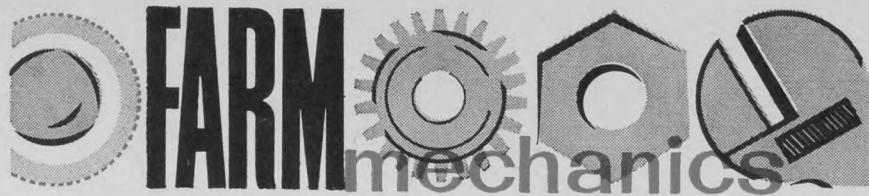
**Use CO-OP Indian Brand Fertilizers**



**For a High Net Return per acre**

## About Pumps and Pipes

WHEN choosing a pump and piping for a water system, remember that a change in one factor will affect the size of the others. R. E. Melvin of the Swift Current Experimental Farm, Sask., says the operation of most pumps depends on the removal of air and water from the suction line between the pump and the water level. Atmospheric pressure on the water surface pushes water up the suction line and into the pump. The total



practical distance that atmospheric pressure will raise water is 22 ft. So the distance from pump to water, called suction lift, must not exceed 22 ft. Suction lift must be measured from the height of the pump to "maximum drawdown," the lowest level that water in the well will reach with pumping.

There is an additional loss of pressure in the horizontal line with offset pumps. The suction lift must be reduced to allow for this pressure loss. The larger the pipe for a given flow of water, the less the friction loss will be. It is necessary to balance the length of pipe, volume of water, and the size of pipe.

## Stable your cows in Beatty steel stalls for as little as \$15.95 per cow:

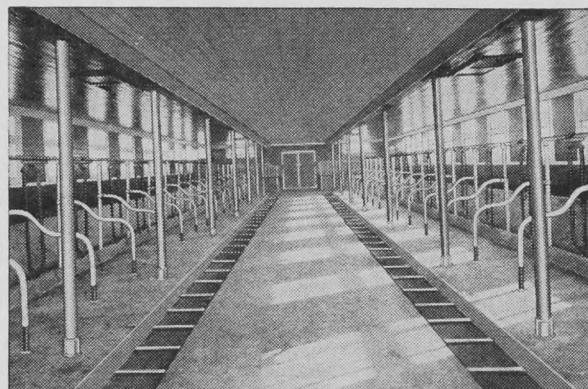
A cow that is dirty, uncomfortable or unhealthy cannot give you all the milk she should. Beatty Sanitary Steel Stalls are developed by Beatty's barn specialists through 85 years of continuous research and testing to help you have the most profitable return from your investment of time and money. They're available with either stanchion or chain tie.

For as low as \$15.95 per cow, you can have Beatty Steel Stalls and a modern stable planned free by Beatty engineers. Beatty Steel Stalls are built to last; cannot slip, twist or loosen. Partitions are guaranteed for life not to rust out at the floorline. Beatty Steel Stalls are easy to keep clean, help you control and eliminate disease.

Beatty Steel Stalls and low-cost pens save you time and labour, help keep your cows comfortable and contented, whether they're large or small... actually help increase production from your herd.

The Beatty Steel Stall is just one example of Beatty's low-cost, common-sense approach to barn mechanization that will lead to years of efficient service. Your local Beatty agent can help you plan and install this kind of labour-saving Beatty equipment that will pay for itself and show a handsome profit! For instance, Beatty's Steel Stalls will help you maintain the sanitary conditions that result in a higher grade of milk that brings better prices and bigger profits.

**GET YOUR FREE BEATTY BARN BOOK:**  
120 pages crammed with facts and figures; photographs of 100 modern stable interiors. Full details are given on cow-comfort steel stalls, reinforced steel partitions, adjustable stanchions,



arch-type triple-post stalls with chain ties, steel manger divisions with feed-saving guard rails, and on how to lay out your stable and equipment to help you manage your time better. This book was designed by Beatty's Barn Specialists for you if you are building, remodelling or just planning for it in the years ahead. Whatever type of stock you feed or barn layout you'll need for top feeding efficiency—you'll find most of your answers in Beatty's free new Barn Book.

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You can calculate the size of pump required if you know the "total head," which includes:

1. The depth from the pump to the lowest water level.
2. The height of discharge above or below the pump, and from the pump to the well or the water supply and the discharge lines.
3. The friction loss in the length of pipe.
4. The discharge pressure.

The "total head" includes a factor for pressure drop in the pipelines due to friction of the water on the pipe walls. So you have to find the volume of water required and the size of pipe to be used.

The vertical distance from discharge to water level is the most important factor. But, if lines are small, the pressure drop in the lines can become large. So the decision to use a shallow or deep pump can be critical if suction lift is in the 15-ft. to 20-ft. range. For example, the pressure drop in 25 ft. of 1 in. suction line at 5 gallons per minute is about 1 ft. The same flow in a  $\frac{3}{4}$  in. line will produce a pressure drop of 3 ft., and in a  $\frac{1}{2}$  in. line it will be 11 ft. A  $\frac{3}{4}$  in. line in this example would be barely acceptable for a shallow-well pump, and a 1 in. line would be recommended.

Depths and distances must be measured fairly carefully if you want the most economical and satisfactory pumping unit. ✓

### Check the Rate of Seeding

CALIBRATE your seeding equipment in the field this spring. The indicators on many seed drills cannot be depended on after a few years' use.

The Ontario Department of Agriculture says that grain seeding rates can be checked in the field by filling the seed box level full and then seeding for a measured distance. If you know the width of your drill, the distance traveled, the amount of seed used, and the area covered, you can easily figure the seeding rate with this formula:

$$\text{Miles traveled} \times \text{width in inches over 100} = \text{Acres seeded}$$
$$\frac{\text{Bushels of seed used}}{\text{Acres seeded}} = \text{Rate per acre}$$

For greatest accuracy, calibrate each seed run individually by tying a bag around each spout, and then operate the given distance.

For forage seeds, start with a setting of 1 bushel on the wheat scale and try the drill on a hard surface. Count the number of seeds per foot of row, and adjust the setting to drop 30 to 35 seeds per foot of row for 6-in. to 7-in. row spacings. Large-seeded crops like brome need to have the drill opened slightly more. ✓

### Preignition and Detonation in Tractors

SOMETIMES confusion exists over the difference in the meaning of the terms preignition and detonation in a tractor engine.

According to Champion Spark Plug Co., of Canada Ltd., preigni-



tion refers to the ignition of the fuel charge inside the combustion chamber before a spark occurs at the spark plug electrodes. It can be started by any overheated surface in the combustion chamber — spark plugs, exhaust valves, pistons or excessive deposits.

In its mild form preignition almost always results in engine roughness and loss of power. In extreme cases, it can damage pistons, valves, spark plugs and other engine parts.

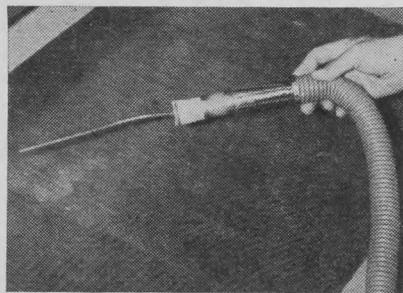
Detonation occurs after the fuel charge has begun to burn. Its characteristic "ping" or "knock" results from vibration of the cylinder-head and block.

The gasoline mixture literally "explodes" inside the combustion chamber.

Detonation may be caused by:

- Using fuel of insufficient octane.
- Badly over-advanced ignition timing.
- Excessive combustion chamber deposits.
- Excessively lean fuel mixture.
- Insufficient cooling.
- Compression too high.

### Machine Cleaner



HERE'S an idea for extracting dust, bits of unwanted metal, etc., from cramped places on machines. Force a piece of soft copper tubing through a hole in a round spool or dowel, so that it will fit snugly into the nozzle end of the hose of a vacuum cleaner. This will go into the awkward places on a machine and clean them up. It can be used also for cleaning a typewriter.—H.J.

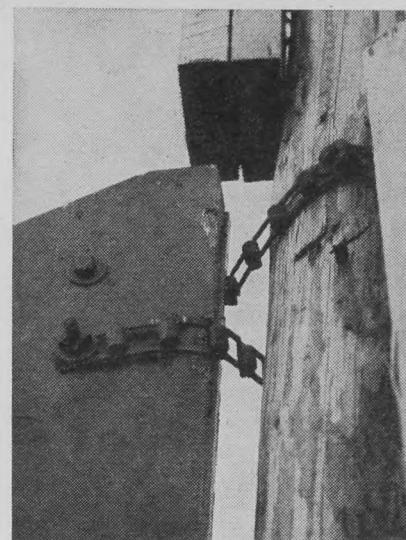
### Servicing Spark Plugs

ELECTRODES should be filed when you service used spark plugs. If this is not done after abrasive blasting, your plugs can be worse than they were before they were cleaned.

Tests reported by Champion engineers compared the sparking voltage of plugs that had been blasted, and the electrodes filed and regapped, with plugs that had been simply blasted and regapped. The plugs on which the electrodes were not filed required more voltage to create a spark than they did before they were taken from the engine in a used condition. The plugs with the filed electrodes performed as well as new spark plugs.

Proper servicing should include abrasive blasting to remove deposits, electrode filing to restore clean, sharp edges to sparking surfaces, and regapping. If plugs are fouled with oil, remove the grease before blasting.

### Use for Binder Chain



[Guide photo  
At Ray Stannard's farm, located east of Penhold, Alta., handy gate hinges have been made of used binder chain.

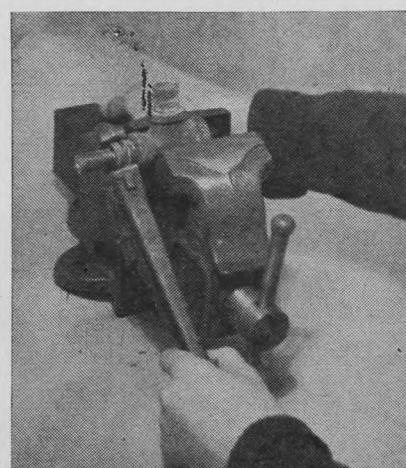
### Use of Auger in Seed Treatment

**I**f you use an auger when treating seed grain with liquid chemicals, pay particular attention to the rate of flow of grain through the auger. The Saskatchewan Agricultural Machinery Administration reports that you get the best mixing of chemical with the grain when the auger is running at the full normal speed but is handling only half of its normal capacity.

To control the rate of flow, feed the grain into the intake of the auger through a known size of opening. Here's a guide to a number of different sizes of openings and the approximate quantity of clean grain which will pass through per hour:

| Capacity (throughput per hour) | Diameter of round opening in inches | Size of square opening in inches |
|--------------------------------|-------------------------------------|----------------------------------|
| 50 bu.                         | 1 1/8                               | 1 1/2 x 1 1/2                    |
| 100 "                          | 2 1/4                               | 2 x 2                            |
| 150 "                          | 2 1/2                               | 2 1/4 x 2 1/4                    |
| 200 "                          | 2 3/4                               | 2 1/2 x 2 1/2                    |
| 250 "                          | 3                                   | 2 3/4 x 2 3/4                    |
| 300 "                          | 3 1/8                               | 3 x 3                            |

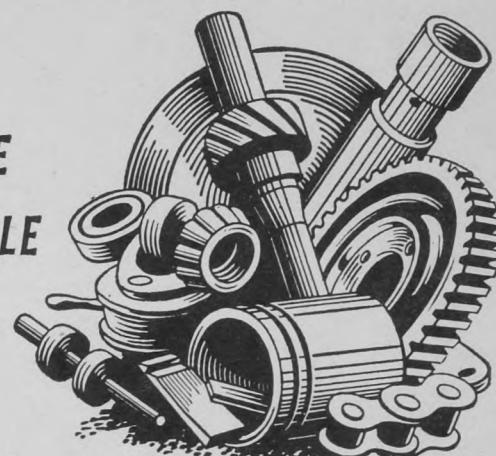
### To Remove Nipples



USING a wrench to remove rusted pipe nipples often causes their walls to collapse, and makes the job of removal even tougher. This can be avoided by first inserting a piece of round steel stock to fit snugly inside the nipple. The wrench will collapse the thin walls of the nipple, and then it will bite into both nipple and steel, and the nipple is turned out cleanly.—H.J.M.

# TEXACO FARM TIPS...

### HOW TO STARVE YOUR SCRAP PILE AT ITS SOURCE

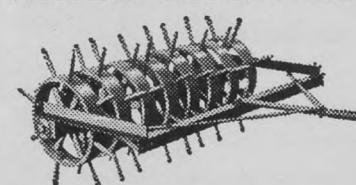


A scrap pile represents damaged tools, ruined machines, wasted time when you can least afford it. It means lost capital, lost profit, even lost opportunities. Today's farmer realizes that he must practice rigid cost control in every section of his operation. Profit margins are too slim to permit anything casual. As a modern farmer yourself, you have a very big investment in complex machinery, an investment that shows every sign of having to be increased. You can protect this capital, lengthen machinery life and lower your maintenance costs by remembering one simple thing: **LUBRICATION IS A MAJOR FACTOR IN COST CONTROL**. The operating handbooks you received with your equipment all specify proper lubrication intervals — intervals you should observe with the greatest of care. This is your first step to maintenance cost control. Your second major step is to use Multifak Lubricant for all appropriate applications. Multifak is a multi-purpose lubricant for use on farm machinery — it just won't squeeze out, pound out or wash out. Multifak will help starve your scrap pile at its source and extend equipment life. Multifak is available in easy-to-load cartridges from your Texaco Farm Supplier — the man you trust for all your fuel and lubrication requirements.

### IT PAYS TO FARM WITH...



### RENEW HAYFIELDS



Aerates by punching holes into soil — allows air, moisture and fertilizer into subsoil.

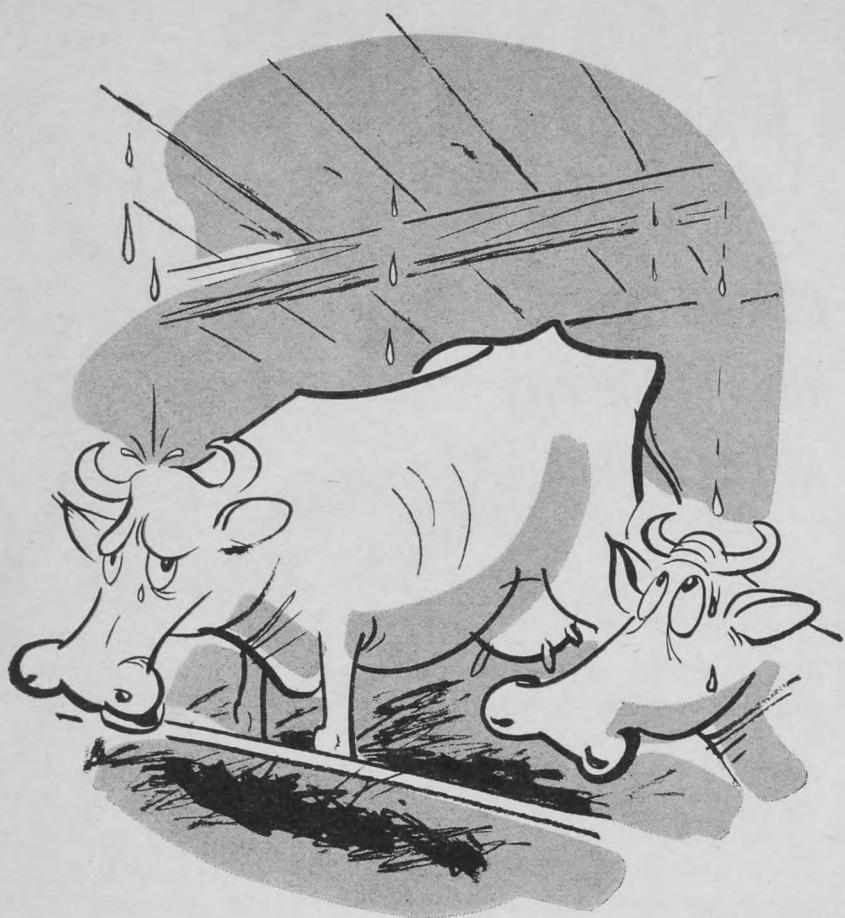
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**"This is no way to treat a lady!"  
"Sure wish the boss would build us  
a galvanized steel barn!"**

Cows have emotions too, and their feelings are usually expressed in terms of reduced milk or meat production. So it makes good sense to keep stock contented—and to keep crops and equipment dry—with shelters built from *steel*. Ask your farm equipment dealer or steel warehouseman to show you a *new kind of steel* made by the "continuous" galvanizing process which bonds protective zinc so tightly that the basic steel can never be exposed to moisture. Will not crack, flake or peel. Rust and corrosion have no place to start.

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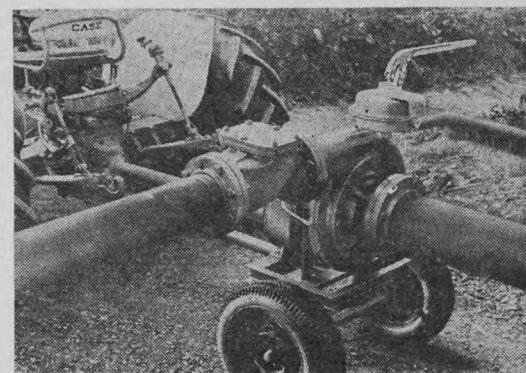
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## WHAT'S NEW

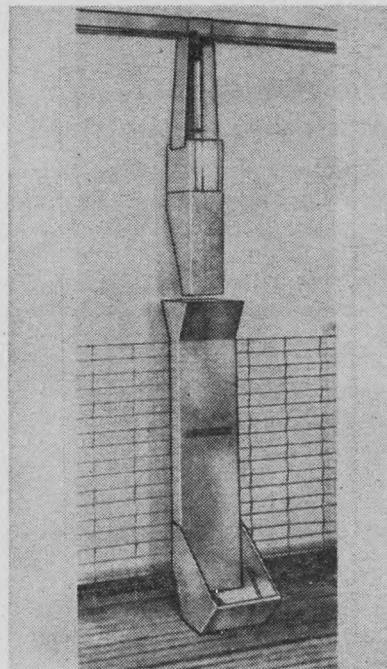
### Compact Pump

The Jacuzzi Tract-o Pump utilizes tractor power and will run off all tractors having a 540 rpm power-take-off providing 3,600 gpm. The unit which is mobile is close coupled to a high duty speed increaser and is suitable for irrigation. (Jacuzzi Bros. Inc.) (411) ✓



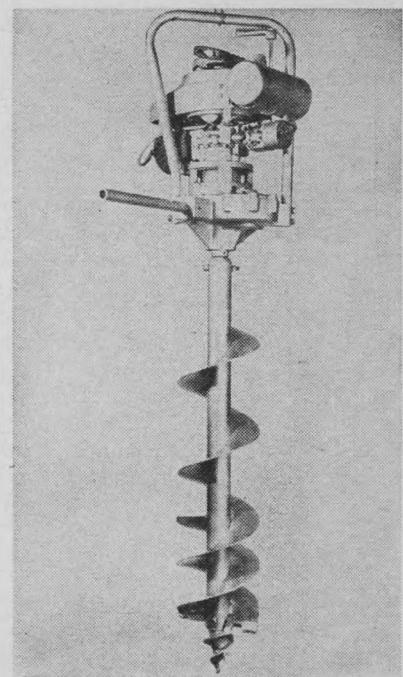
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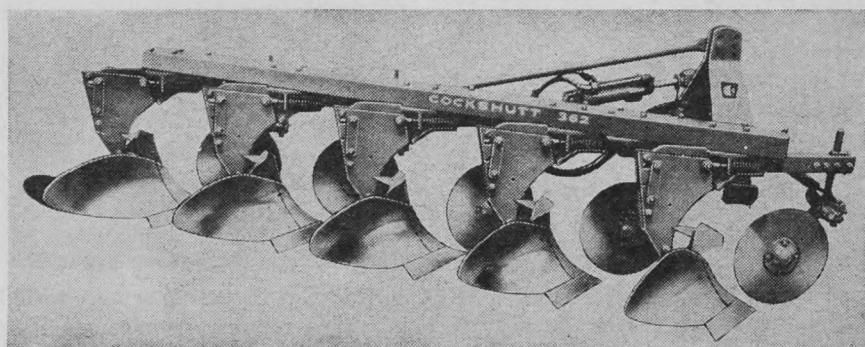


### Portable Drill

The Feldmann portable all-purpose drill is available with 2 1/2 H.P. motor and 7" earth or ice bit and auger, or with a 3 1/2 H.P. motor and 8" earth or ice bit and auger. The drill is completely portable and knocks down for easy transporting. It is built for heavy duty service in fencing, soil testing, tree planting, stump blasting and ice drilling, and is light-weight for easy operation. (Franklin J. Scott) (413) ✓



### Cushion Action Plow



The new Cockshutt model 362 series plow features 4 and 5 bottom plows with independent suspension. It is also available in the 2, 3 or 4 bottom model 361 series. (Cockshutt Farm Equipment of Canada Ltd.) (414) ✓

For further information about any item mentioned in "What's New," write to WHAT'S NEW, The Country Guide, 1760 Ellice Ave., Winnipeg 21, Man. Please quote the key number that is shown at the end of each item.

# COMEDY FOR TWO PLAYERS



FOR a moment the surface of the pool was almost still, save where a quiet ripple ringed the stems of the reeds, the echo of an eddy of the water that was seeping in from the river. For a moment the radiance of the dying sun was withheld by a drifting cloud, far westwards; and the air was tranquil.

Then, as though it were a small stage awaiting the entrance of the players, the surface of the pool was lit by the floodlight of the sun's beams, as the cloud passed; and where there had been calm there was now small movement; where there had been silence there came little sounds: the stirring of the reed heads as a water vole crept, climbing to the sweet grass above the fringe of mud, and there nibbling the blades. A small frog sketched a ringlet on the surface near the other bank, and, lifting his glinting form into the ruddled light, surveyed the evening with his gold-rimmed eyes.

by **ELLESTON TREVOR**

Illustrated by **PIERRE**

With the sound almost of a long-drawn cello note there winged a humming bird hawk-moth from the river's wide expanse, to cross the pool and vanish over the meadowland beyond. Yet these diminutive folk were but the members of the chorus; the leading actor was yet to arrive for the evening comedy. After the moth had gone, after two other frogs had joined the first in his contemplation of the twilight, after the water vole had plucked the first sweet blades of his evening meal, this prime player came, down from the heights of the tall trees whose sunlit heads towered as battlements to the river's moat.

From the nest of twigs he had unraveled his great and gangling legs, had spread out the creaking hood of his wings, and now sailed, as sure and as heavy as a stout-rigged windjammer, down toward the pool. On the narrow and muddy shore his legs came down and his feet struck, before the wings were furled. He stood, alone in the spotlight of the dying sun, like a great gray sentinel, with his long head poised vigilantly upon his even longer neck as his eyes watched the water, and his tapering beak held like a bayonet.

THOSE who had seen the heron, those who had heard the heron, those who had scented or even sensed him—fled, with a plop or a splash or a trembling rustle of the reeds—the vole, the frogs, the finned denizens of the pool—fled; and the heron stood like a dry old stick on his comic stilts, his shoulders set in a shrug.

For a moment he was in command of the little evening stage, a solitary figure, a lone fisherman, with his two black plumes hanging limply from his narrow, secretarial head. Then came the second leading player, making his entrance very differently.

FROM the pool there ran a gully of water to the broadway of the river; and through here the swimmer came, almost invisibly and with scarce a sound. He came disguised as a quiet V of ripples whose leading angle was made by his head—yet little even of his head was above the surface: just enough of it to allow his eyes to wink, his ears to hear, his nostrils to probe the air.

The heron watched his coming; and maybe he swore, deep in his horny beak. The crest on his head twitched once in annoyance; and, maybe, if it would not have broken the tranquillity of the water he was trying to fashion for his quiet purposes, he might have stamped his foot in mild temper.

The otter reached the pool, and, fully conscious of the effect of his appearance, dived, and vanished. The ripples ran wide and grew smooth, lapping feebly among the reed stems; a few chains of silver bubbles rose, and popped on the surface.

The heron stood, a silent figure whose rage was confined for a moment in his sense of self-control; and then, when it grew too much, he let out a great clattering *h-hraakk!* of a shout to vent his feelings. But the otter's ears were closed, deep in the sunlit pool. He would not have been surprised by the oath from the bird had he heard it; he merely did not hear it, for he was busy. There were few fish down here in the depths, but there were eels, emerging from their daytime slumbers in the concealing mud to go a-foraging on their own. Had the otter come here for supper he would have been a fool, for there was more for his speed and skill along the river's reaches; and the heron knew it. The otter was here for sport; and the heron knew that, too; for he was the sport. . . .

(Please turn to next page)

(Continued from preceding page)

He stood for another moment like a rod of disapproval, consumed with the bitter knowledge that his pool, his own, personal pool, was, for the second night in succession, invaded by that sleek and sinuous varlet from the alder holts. Then his eyes caught the soft flash of a movement near him and his great head came down like a thin hammer and his wicked beak stabbed, and missed. The eel, disturbed from the mud and seeking escape from the brown enemy below, had escaped the point of the gawky fisherman. It had been no fault of the otter's that the bird had missed — indeed, the otter had sent him the eel as a gift (as the heron might have reckoned had his thoughts been charitable) — but in his angry old mind he marked this accident against

his enemy, and stabbed again in sheer crossness.

A WHITE admiral flitted past his head, dancing a nimble dalliance down the slanting sunbeams, and winged among the purple cloud of comfrey by the shore. The heron stood, fuming but determined that he was not to be driven out of his own, personal, purely private pool by any impudent upstart. His legs moved suddenly, and he accepted the challenge, wading round the shore with a stately, dignified tread; but his head was down and his eyes were alert for movement. Twice he stabbed, and once brought up a frog; but it was so meager that it was little better than an insult to his stomach.

From the depths of the pool there now rose a swirl of muddy waters;

and the otter broke surface not far from the heron, an eel—a long and succulent female—in his jaws. On the bank he ate it, stripping it to the bone almost before it had ceased its death-movements. The heron watched for an instant, and then his good sense triumphed over his indignation, and he waded aloofly toward the rushes, there poking and spearing, once catching a frog, once a beetle, once catching his beak upon a hidden stone. This gave him such a measure of good, honest fury that he spread his wings and was lifted into the air, to drop straight at the crouching otter with such a honking from his beak that the sound echoed back from the belt of trees, a bold, strident complaint.

The otter had gone, diving into the pool and closing his ears to that

hideous din that surely no decent bird should ever utter in the peace of the sunset. An instant later the surface broke with a burst of water beads and there was flung up from the depths the writhing length of an eel whose glinting form was tossed amid a spangle of spray that seemed almost to be a blaze of sparks in the fading sunbeams, and the heron dug his legs into the shore and brought the great wings forward with a mighty creaking of the vanes and with his neck straightened and his beak out-thrust he crashed toward the titbit. He was struggling, out of his depth, before the eel had hit the surface and threshed away, leaving the bird to regain the shore where he might stand without getting his feathers rudely soaked.

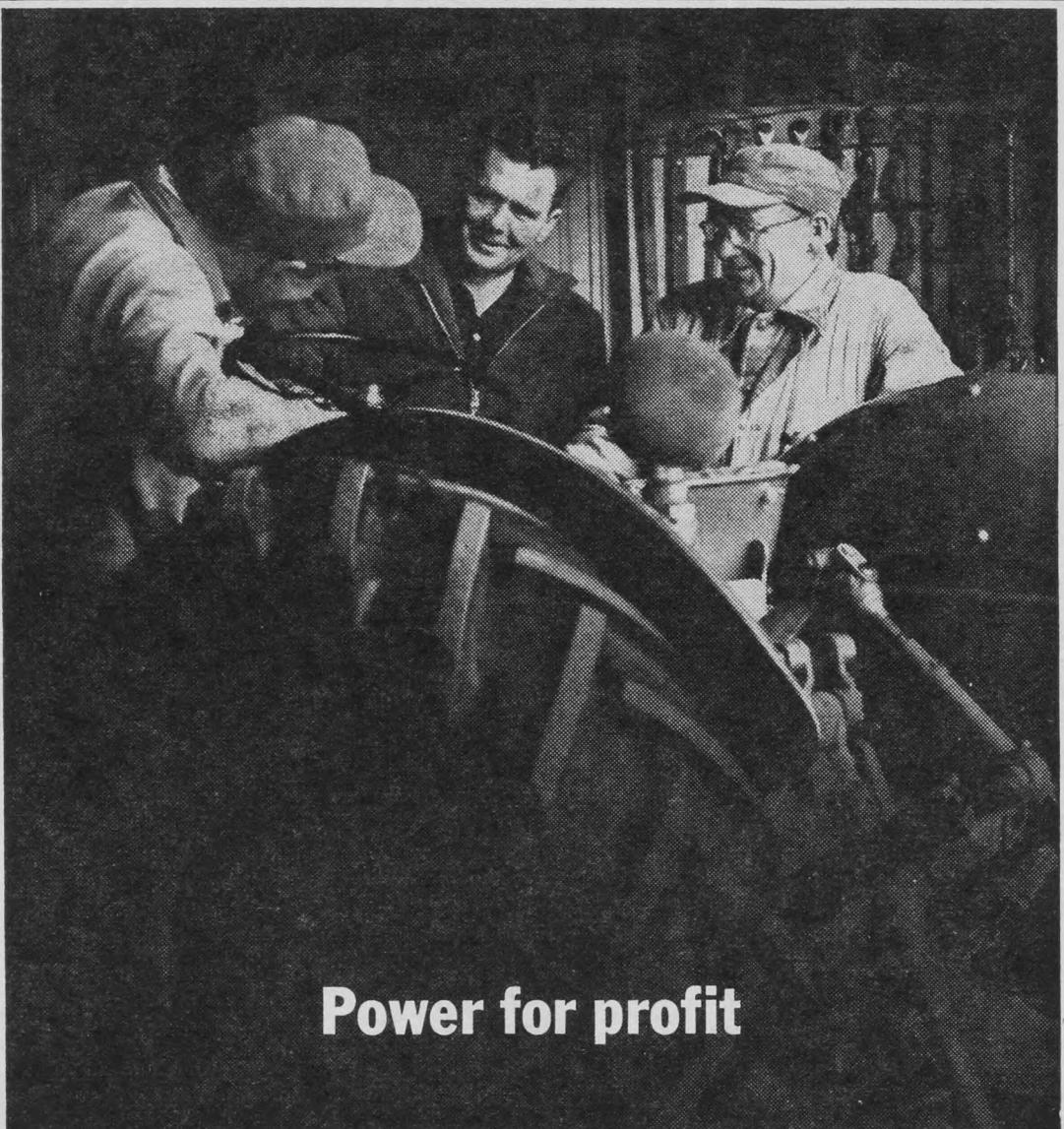
BELLOW and out of his furied sight the otter turned in the depths, his every movement boisterous, the epitome of all the carefree humor of his species whose sense of the comic and the ridiculous almost matched its command of waters, fresh or salt. With his webbed feet thrusting at the water, his flattened tail swerving with the speed and purpose of a truly magnificent rudder, he dived and circled, cleaving the surface of the mud and freeing the things it hid, flashing to seek an eel or a fish and then, finding it, diving beneath and attacking with such a power of limbs that whatever met his jaws was stunned in the instant of its capturing.

It was almost dusk, and the water was dark, for the mud had been stirred and had been lifted in great ruts and plumes from the bottom, riven by the threshing of the otter. He had eaten his fill, and would have gone away to the alder holts had he not known the heron was still here.

The heron would have gone away, to fetch a meal from another pool or a more distant reach of the river; but the otter was here, in his own private pool; and the bird was darned if he'd go. He stood, now on one stick-like leg, poking and peering, stabbing and spearing at the murky waters that were everywhere ringed and broken by the otter's diving, the otter's rising, the otter's gamboling. The otter was a brown buffoon, plunging and clowning in a person's private pool; and the heron cussed him down the length of his empty beak.

The place was in confusion by this time, only a few minutes after the coming of the actor and the clown. A meadow brown went by on delicate wings, a casual traveler; but the frogs were lunging and seeking shelter from the swirling water and the beetles were slinking to stone and reed while the water vole had long since scuttled to the small round hole in the muddy bank; only the eels glided, nosing into the mud even as it was churned up again, threading, gray-bodied, among the reed stems and out again, anywhere to avoid the commotion of the waters where the otter ran tumbling in the depths.

A GAIN he found a fish and tossed it clear of the surface where the heron would see it flash; and this time it rose closer to the bird and the bird shook his wings open with a



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honk of triumph, lifting from his stilted stance and beating loudly and with a great creaking of pinions while the beak opened to snatch and the head went forward. It was then that from the deeps there came the otter like a brown javelin that thrust to the surface and sent up such a burst of spray that the heron's wings took it and tossed it as a fiery mist in the rays of the faded sun, while the sleek brown body rose sheer from the water and turned in a trembling arc to plunge so near the straining heron that the fish was lost and the bird beat desperately to clear the element in which he could not be master, for he could not swim a stroke or even float with any comfort.

His beak clattered with rage and not a little fear; his wings thrashed the water and lifted him from the boiling eddies that were sent out by the otter's pounding tail; in a moment the bird was alighting on the further shore, turned to face the pool, where now the water was in comparison becalmed, with but a ring of ripples to mark where the otter had gone down.

The heron stood, livid but motionless with rage, silent and speechless with humiliation. It seemed there was no humor in the bird. For fully a minute he remained, gripped in wrath, watching the pool for his boisterous enemy the brown, light-hearted clown; then he reached, after due deliberation and the careful contemplation of the circumstances, his decision. The otter could keep his bit of water to himself.

The wings creaked and the tall body lifted, trailing the gangling legs. The comedy was nearly over; and if he had not quite seen the point then he had provided it for the brown buffoon. The bird rose, and veered into the west, where now the sun was casting upwards no more than a stain to the drifting bellies of the clouds. Yet, even as he flew above the reeds, he heard a sound from along the river, and dropped without hesitation to the grass. There he stood, head cocked, crest jerking, wings furled, listening to the strange fluting voice that piped among the dusky willows.

HIS were not the only ears to catch that distant sound. Rising to the bank of the mud-black pool, the otter heard it too; and crouched, head turned, listening in sharp attention while the beads of water trickled down the glossy fur soaked into the mud.

The fluting came again, clear and melodious among the willows and the alders; and the otter moved,

running with a low and gliding gait for the broader waterway where the current ebbed unhurried between the banks. Here he slipped in, and, folding his forelegs to his flanks and holding his head just surfacing, he drifted on the lazy current, down-water to the lower reaches of the stream.

The piping came, ready and clear, leading him onwards, bidding him ignore all the other things, all different sounds, all thoughts but that a mate called, an otter bitch among the alder holts.

Behind him, the water of the pool grew calm, and the last ripples ran to the shore and ringed back, colliding softly one upon another and diminishing and, at last, losing their movement to the placid surface of the pool.

The heron waited, hearing the fluting, hearing the going away of the otter, knowing the meaning and knowing that now his pool awaited him, tranquil and serene. His wings beat and he rose, to drop his body slung between the two spread hoods and his legs depending, until his feet touched the mud, and he settled.

FROM his nest of fish bones a kingfisher came, darting among the aspens and flitting like a bright-blue flame above the soft-blue brooklime by the pool, with a *h'wee h'wee h'wee* from the tiny throat.

A frenzy of alder flies were mazing in a circle, wreathing the heads of the reeds, lifting and lowering, spinning and spiraling, not far from where now stood the heron, deliberating upon nothing except the new unchallenged possession of the pool. His head was tilted a little downwards, and the plumes hung limp; his legs grew from the shallow water like dry stalks, supporting this weight of gravity and dignity, this monument of concentration.

The bachelor stood alone, communing with his private table beneath the brightening stars, while the gay young buck of the riverside was off to meet his mate.

Once, twice the great beak stabbed, its aim impeccable, its purpose well attained. And with the third stroke he speared an eel as long as his own long legs, and speared it true, lifting it and releasing it and catching it and then with a triumphant toss of the head, swallowing it at a gulp.

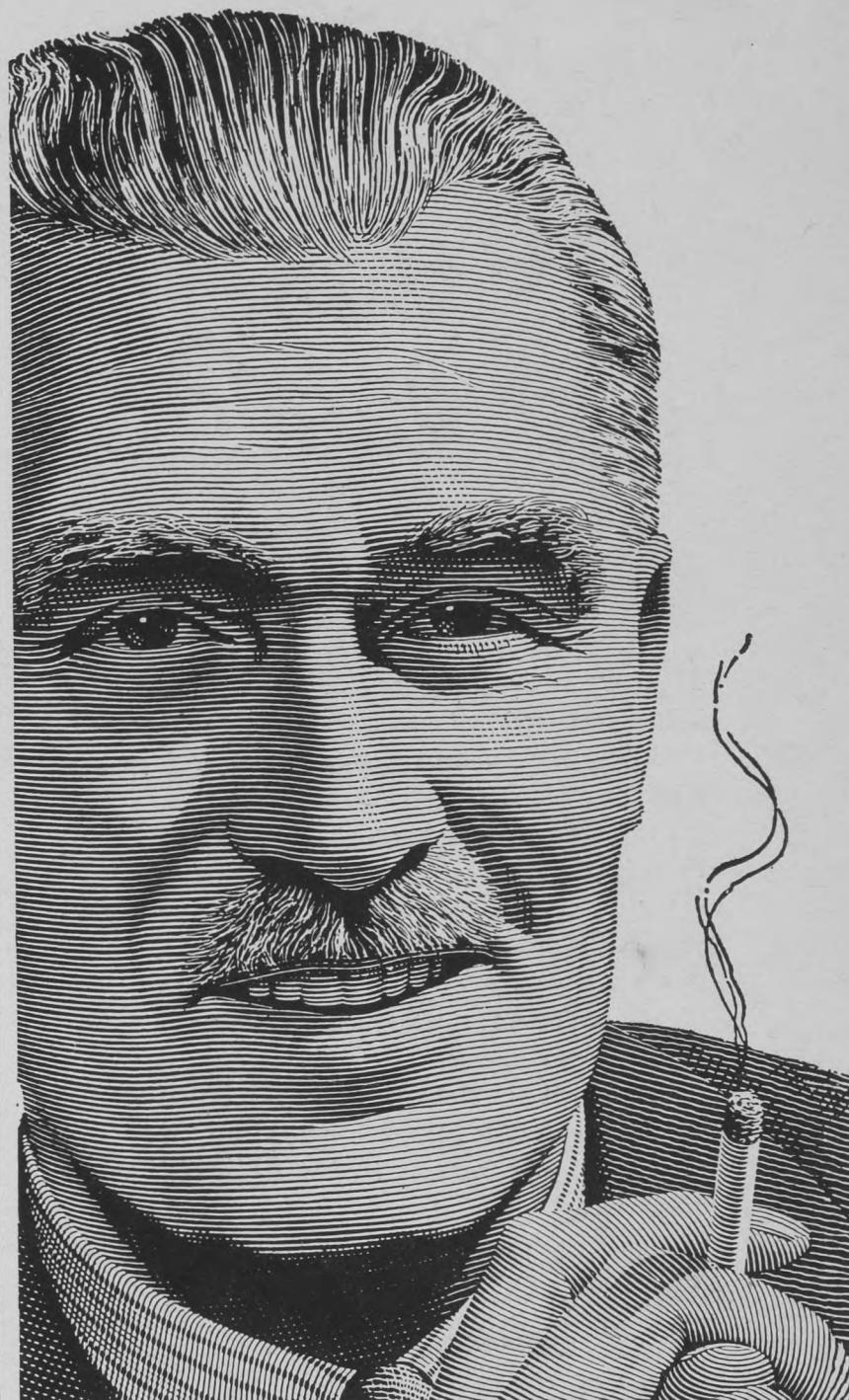
The old bachelor stood for a moment, contemplating this fat success with much gratification. Then, because his anger was gone and he had found enjoyment in the meal — or because, maybe, he thought fit to raise a comment upon the affairs of dallying folk who could be led by their nose by a single flute—the heron lifted up his narrow head and opened his horny beak: and let out such a clattering, honking shout of glee and sarcastic derision that the otter heard it from away upriver and was almost deafened by it as he frolicked with his mate.

The small stage where the single actor stood, alone and with the quiet rustle of the reeds in the darkened auditorium, was rocked with the humor of the bird. The comedy was his, and there he stood a moment more, near honking himself off his spindly legs with the mirth of it. V



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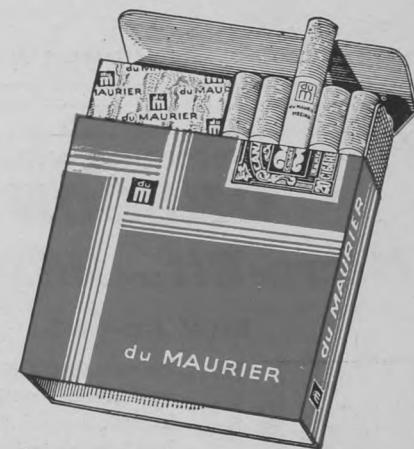


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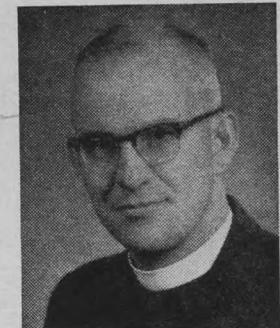
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## Let's Think It Over

by THE VERY REV. M. L. GOODMAN



### Chairs

On those nights when I return home around ten o'clock, fairly tired, and ready to enjoy a half hour's television, all too often the available program is a panel discussion. After a day of various kinds of "discussions" one more doesn't appeal to me as entertainment. I realize that this repeated disappointment has biased my reaction to such programs.

I see in them a persistent symbol—"the chair." The panel members are almost always seated—and very comfortably seated while they discuss the great issues of human experience, including religion. One implication is that you can take life sitting down and just talk about it. There are other implications as well, such as the idea that much of what men believe is only a matter of opinion. I am reminded of the Athenians "who spent their time in nothing else but to hear or to tell some new thing."

I remember sitting in one chair which turned out to be mighty uncomfortable. Some minor league sadist had wired it so as to provide an electric shock for anyone foolish enough to sit down—I sat—and I rose, quickly. There was more action than discussion in regard to that particular chair! Maybe that experience is more true to life, too. You can't just sit around and talk. Life is not an endless debate. If you're really going to live you must make "the leap of faith," and commit yourself—get into action.

*Suggested Scripture: Acts XVII, 18 to end.*

### The Snake in the Grass

That's a somewhat vulgar expression—"the snake in the grass." I suspect that it comes from the Genesis story of the fall of man. The devil who tempts Eve is portrayed as a serpent and the judgment upon him is "thou art cursed above all cattle, and above every beast of the field; upon thy belly thou shalt go,"—thus, Satan—the betrayer—the snake in the grass.

Nowadays some folks are inclined to dismiss the idea of the devil. The traditional picture of him seems like something out of the funny papers. In depicting him we have a caricature of horns, hooves and a forked tail!

While we can't draw pictures of him which have any basis in reality, the devil himself is real. Your idea of him may not be quite my idea, but we both know about him, and we both need to look out for him.

Recently, while visiting my brother I came across an old prayer book on his shelves. In the back of the book were written these words—"Morse's ordination, May 1, 1942. Text—Ecclesiasticus (the Apocrypha) II—verse 1—"My son, if thou would serve the Lord, prepare thyself for temptation." I'm ashamed to say that I had forgotten that text. I will not forget it again. After twenty years I know its truth. It applies to every one of us who makes any attempt to serve God, whether he is of the clergy or of the laity. It startles me to realize that some people think that the priest or the minister has an easy time of it as he is delivered from the ordinary temptations of men. This is nonsense. Not one of us escapes temptation. There are no special "through tickets" to Heaven. We must all deal with the snake in the grass.

*Suggested Scripture: I Peter V-8 to 11.*

### Inebriated Friends

One selfish argument for NOT wearing a clerical collar is the lack of it may help protect you from gentlemen who have had too much to drink.

There's a certain stage of inebriation when a religious discussion must seem to be just the thing! On the street, or in the bus, the man who has arrived at this stage will accost the nearest parson, when under more sober circumstances he might avoid him like the plague. Although the situation is against fruitful outcome, there is no easy way to escape the encounter.

How would YOU answer the unsteady man who says in a beery voice—"Now Padre, I want you to listen to me. I don't believe in God. You tell me where I'm wrong. I don't believe that anybody can prove that God exists. When I die, that's the end of me, and when you die that's the end of you." He may look at you a bit triumphantly, or at least knowingly, with the implication—"you can fool the other fellows, but you can't fool me."

What WOULD you say to him? Well, you can't say very much and he probably won't remember what you do say. However, we are told that when men are drunk they are likely to say what they really think. Thus our inebriated friend may well speak for a good many sober people who are either afraid, or too polite, or too respectable to speak for themselves.

In answering him we will say to them the only thing that can be said—"No, I can't prove God to you. You are right, no one can. Nevertheless, I KNOW GOD IS. I don't just believe, I KNOW." Then you say something else which will be either helpful or absolutely infuriating—"I began by believing, by taking a chance that the idea of God is true. As someone has put it—I bet my life on God. That's the only way you can find out."

*Suggested Scripture: St. Mark IX-17 to end.*

# Home and Family

The Country Guide's Magazine for Farm Women

## Is It Wasteful to Educate a Girl?

by ELVA FLETCHER



[Man. Dept. of Education photo]

**M**Y father says it is a waste of money to send girls to high school. I make good grades and I want to continue my schooling. I know that an education is not a waste of time and money. How can I convince my dad that it is important for me to get a good education?"

Fortunately, an opinion of this kind is much less common now than formerly. It does occasionally creep into conversation when discussions center on the value of a university education for girls. Was it in some similar circumstance that someone once said "when you educate a boy, you educate an individual; when you educate a girl, you educate a family."

Education can be expected to supply a girl with information and give her the skill to use that information wisely. Among other things, she will learn where she can go and to whom she can go in her search for answers to her questions. A good education helps her to solve the problems that may be expected to arise from day to day, to use her talents effectively and to develop her own individual skills.

Who has a greater need for education than the homemaker?

Today's homemaker needs to know so many things if she is to make her home a pleasant place in which to live. She needs to know something about child care and first aid. She is often called upon to help with farm accounting records and to assist with decision-making concerning the farm business.

Her influence upon her family is far-reaching. In large measure, it rests with the homemaker to develop a satisfying pattern of family life. She has the first opportunity to instill high ideals, knowledge, wisdom and family pride in the members of her family, and, in this way, help them to become responsible, useful men and women. Doesn't all this suggest her need for a good education?

**U**NTIL quite recently, a girl's education might have been restricted because neither she nor her family were aware of the choices of training and training facilities within her reach. The need for this kind of information has been met in part by a new pamphlet issued by the Women's Bureau of the Canada Department of Labor. Its title: "Vocational and Technical Training for Girls in Canada." It costs 35 cents and can be ordered from the Queen's Printer, in Ottawa.

This little publication outlines new study opportunities for girls at high school, post high school and trade school levels. It tells of the

many courses that are open to them in each of the ten provinces. Marion V. Royce, the director of the Women's Bureau, hopes it will encourage girls to search for the kind of training that will best answer their individual needs and interests.

Training, she points out, must take into consideration the special knowledge and skills that are necessary in Canada's changing industrial life. Even the requirements for more familiar occupations — nursing, teaching, office work — have changed and become more exacting in their demands. Other changes have taken place. For example, women live longer nowadays. As a result, they spend a much larger part of their lives in the labor force than they used to. A few years ago, girls expected to leave work when they married. Now there are more married women than single women in the work force. Today's women may continue to work after marriage. They may withdraw from paid employment at some stage in their life, but more than likely they will return to the labor force later on.

The possibility that a woman may return to work outside her home underlines the need for her to get a sound education and the training that may be useful to her in the future. Should she lose her husband the educated woman is better prepared to make a living for herself and her family.

**A** GIRL needs to get as much education as she can. To send a girl to school is to invest in her future and her family's future. To the girl, an education is her opportunity to develop her own special abilities and help her to organize, analyze and use those skills more effectively.

Someone has said that the hope of the world lies in love and enlightenment. Certainly education is enlightenment. It pushes ignorance and superstition aside so that knowledge can come in. More than anything else, education widens a girl's vision of the world in which she lives. It deepens her understanding of people and places, of events and things. It may even uncover talents of which she herself is unaware.

The fact that today's girls are the homemakers, wives and mothers of the future is reason enough to give them the best possible education. No other group has the same opportunity to influence young people for good. If "the hand that rocks the cradle rules the world" then doesn't that hand need to be as skilled as a good education can make it? v

# Dress Up Your Beds

**Leaflet No. S-SS-10**, 10¢, gives diagramed cutting and sewing instructions for making this handsome bed set consisting of spread, dust ruffle and pillow shams. Bedspread and shams are of glazed quilted chintz; sham trim and dust ruffle of printed drapery fabric.



**Leaflet No. 8187, 10¢,**  
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small floral spray motifs.  
Diagrams are keyed for  
Stem, Satin, Long and  
Short, Daisy, and  
French Knot stitches.  
Directions for placing  
the motifs are included.

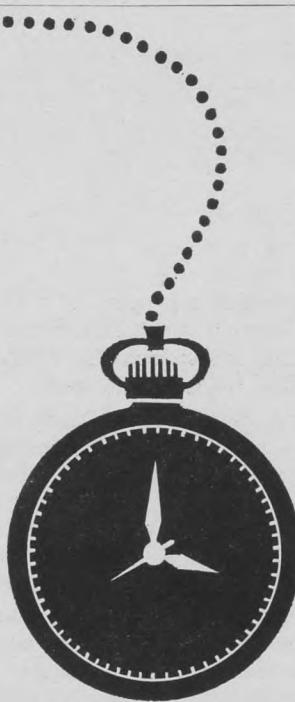


**Leaflet No. A-104, 10¢,**  
includes crochet instructions  
for this "Noonday"  
bedspread design in both  
single and double bed  
sizes. The individual  
motifs joined together  
for spreads and matching  
full-width pillows  
measure 5½" sq.



**Leaflet No. S-6321**, 10¢, offers cutting and sewing instructions for a polka dot and plain comforter cover, pillow cover, bedspread and ruffled valance.

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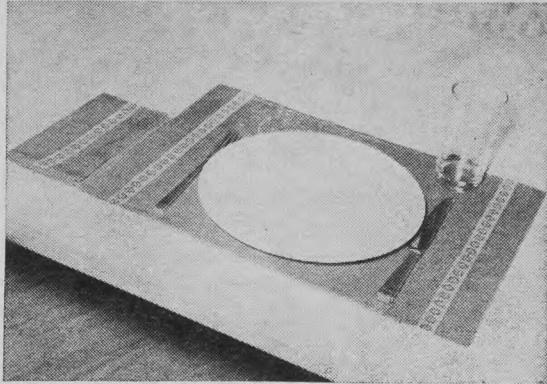
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## A Guide to Foundations That Fit

### Figure Type

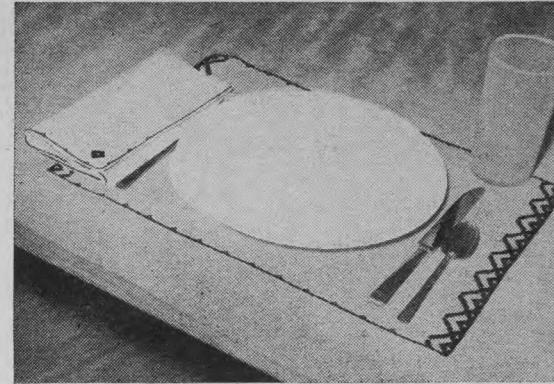
|         |                                      |  |
|---------|--------------------------------------|--|
| Junior  | High bust line                       | Bras: bandeau type or lightweight long-line, padded for rounded contours   |
|         | Small waist                          | Girdles: soft lightweight roll-on type, perhaps front and back panels for additional control                           |
|         | Slender hips                         |  |
|         | Firm flesh                           |  |
| Average | Well-developed bust line             | Bras: any type that gives a good uplift, long-line if a roll is noticeable   |
|         | Tendency to a roll at the waist line | Girdles: front and back panels to flatten; hip panels if flesh is soft, minimum boning                                 |
|         | Heavier bone structure, fuller flesh |  |
| Full    | Ample bust line                      | Bras: built up at sides and back with wide straps and reinforced cups  |
|         | Full waist and hips                  | Girdles (with closures): front and back boning and special control features. (Pull-on types don't give enough control) |
|         | Fleshy thighs                        | Full figures with big bone structure can wear lighter weight foundations   |



#### Fine textures . . .

The two place settings shown are examples of place mats made of finely textured fabrics. On the right a cross stitch design of stranded floss decorates a place mat of Bisso linen.

The place mat on the left is made of blue Indian Head cotton. Its simple design consists of vertical bands of decorative tape (a blue daisy design on a white background) to contrast with the blue of the place mat. They "frame" the plate. One band of tape decorates the serviette. Mrs. Bentley offers this design as an example of maximum effect with minimum effort.



[Guide photos]

## Basic Design for Beginners

by ELVA FLETCHER  
Home Editor

**W**HAT is design? And what makes good design? Most frequently we think of design as a plan or a sketch. But design also means the artistic and skillful use of the elements in that plan or sketch.

When I queried Helen Bentley in regard to the principles of good design she explained that these principles involve the right blending of line, shape, texture, color, idea. The end result is the creation of a well-ordered whole. In that whole can be found proportion, balance and rhythm. In the application of these principles she says "I'd hope that the whole would be useful as well as beautiful."

These phrases may seem strange at first hearing. Actually the qualities they describe are all around us if we care to look for them. For example, they are to be found outdoors, in the symmetry of leaves and flower petals. Designers apply them to furniture designs, to china and flatware.

Helen Bentley is one of many women who serve the interests of both town and country women. She lives in the city, yet her particular skills take her into rural areas, sometimes to teach, sometimes to judge at country fairs.

She is, first of all, a homemaker. She is also a graduate home economist whose training has taken her into a variety of fields. For example, she frequently lectures on home economics subjects for the University of Alberta. Last year an Edmonton television station asked her to conduct a homemakers' program with the result that she acquired some modest fame as a television personality.

Her program featured new and useful ideas in foods and fashions for the home. She particularly liked it because it gave her another opportunity to further her special interest: an awareness of what constitutes good design. She often uses place mat settings to demonstrate what she means by "good design."

**W**HETHER meals are served at the kitchen table or counter, or on TV tables, attractively designed place settings enhance the appearance of the food being served. And, that, of course, is the basic purpose of the setting. Because the food is the primary interest, Mrs. Bentley suggests we "try to form a pleasing and pleasant background for it." As she explains it, "the food is the reason for being at the table in the first place."

She offers some easy-to-follow directions for attractive, well-designed place mats. First, she suggests they be made in a conventional size, such as 12 by 18 inches. Let any decoration follow the shape of the mat. (The same holds true for any tablecloth decoration, whether it is round or rectangular.) The reason for this, of course, is that a decoration is most pleasing to the eye when it follows the shape of the article on which it appears. This cancels out decorations

that cut across corners or those that form what Mrs. Bentley calls "spotty areas of decoration."

The decoration should not have too much color. Neither should it be overpoweringly big. In other words, its size should bear a relationship to the size of the particular table cover. Matching serviettes should be a useful size and their decoration a smaller adaptation of the motif used on the place mat.

Choice of color is important to the whole. When choosing colors, remember that place mat settings should harmonize with food colors. In Mrs. Bentley's view, this almost eliminates soft pinks, baby blues and strong oranges, because these colors have little in common with most food colors.

Food actually looks more appetizing when it is served on plates that are white, grey or very soft green in color. Any one of these allows for greater variety of color in the place mat itself. Still, as Mrs. Bentley explains it, "There is no need to limit either color or design in table coverings. You can easily compensate for brightly colored mats by using plain dishes and flatware."

**E**ACH of the three basic fabric features—fine, medium and heavy—suggests comparable qualities in the other articles that complete a place setting—the plates, the glass, the silver—as shown in the accompanying illustrations.

One of Mrs. Bentley's favorite examples of good design is the classic white plate with a narrow gold band that has been a favorite with

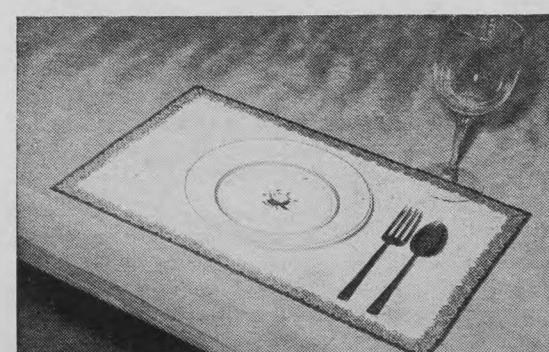
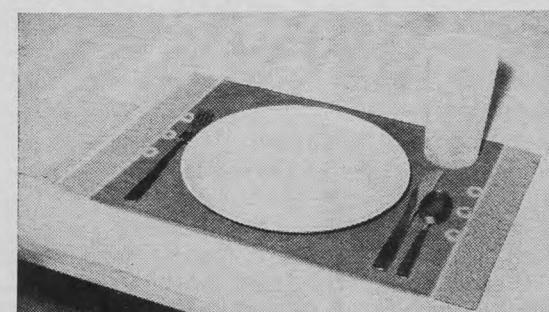
homemakers for generations. She is equally enthusiastic about plain silverware. She explains her enthusiasm this way: the plainer the silver, the more lasting its beauty. This is reason enough for her enthusiasm about stainless steel flatware. "Simple designs," she points out, "fit in with simple unaffected furnishings and they are much more easily cared for than heavily carved designs."

**P**RICE, of itself, does not assure anyone of good design, she points out. That is one reason why Helen Bentley very often makes her own place mats using such inexpensive fabrics as sail cloth, awning, burlap and denim. Used with tableware that is compatible of color and texture they achieve their basic purpose—of providing a pleasant background to the primary subject—the food being served.

Insofar as she is concerned the inexpensive plain or frosted tumbler is preferable to fragile stemware for most occasions. After all, she says, the tumbler is more useful; and it is also easier to wash and to store. "Isn't this reason enough when there are so many demands upon the homemaker's time?" she queries.

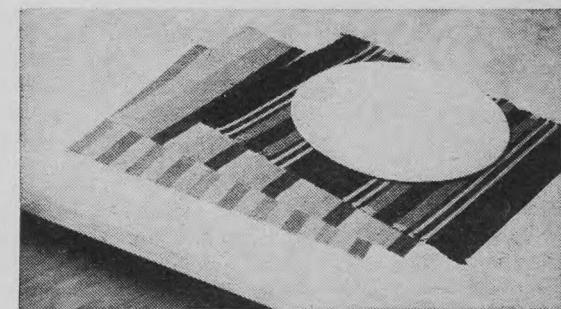
As we moved from place setting to place setting, Mrs. Bentley proved to me the truth of something I read long ago. It was the observation that "good design is simply beautiful and beautifully simple." We are always ready to admire this quality in other homes. We too can have it if we are prepared to be "designing women." ✓

#### Medium textures . . .



Ribbed cotton borders trim a place mat of green sailcloth. These borders were stitched in with white rug cotton looped in a simple circular design to focus attention on the plate. In the second mat, the design flows around the outer edge and frames the plate and goblet. Settings of this kind are suitable for formal occasions.

#### Heavy texture . . .



Attractive place mat settings need not be expensive. Awning fabric in narrow stripes was used for these mats. Bottom and top edges were fringed; the sides were turned back and hemmed inconspicuously. ✓



Aileen brought an aged grain measure from old farm. Note colonial print on family room chesterfield (left).



Louvered folding doors installed to divide family room from living room are painted antique white on walls.

The warm red of Aileen's tri-color scheme carpets the family room and living room and dominates the colonial print drapery and upholstery covering

The white, an antique tone, she used in drapery in the rooms at left, on living-room walls, and fireplace chairs

The black accent appears in custom-covered furniture below—a line design on an off-white background

## A Dream of a Color Scheme

by GWEN LESLIE

Home Editor

If you could have a wish come true, would it be for a new house and money enough to decorate it as you'd like? That dream came true for Mrs. Harry Wood.

For most of her married life, she lived on her husband's 100-acre family farm near Woodbridge, Ont. Trees and swampland limited the amount of usable land. To keep the farm, both Harry and Aileen held jobs off the farm. Then the land, so close to sprawling Toronto, became just too expensive for them to farm, and they negotiated its sale.

"We got a good price for the farm—although other farms have gone for more," Aileen told me, "but by taking back the mortgage we decided the return from the investment would provide us with an income we could live on, and even travel some." Harry, in his wife's words, "a young man still at 51," stayed on with the highway maintenance work he did while on the farm, although taking a job with less responsibility than he had as patrol foreman.

With the cash payment from the farm sale, the Woods set out to find a home for themselves and their two children, Louise and Randy.

Leaving the farm didn't mean they must leave country living, nor did they intend to. Years earlier, Harry had admired a wooded site on Highway 50. While they were househunting, the property and the house built on it several years ago came up for sale. Aileen looked through the house and left dismayed by its dark-stained woodwork, hardwood floors and dark-painted wall colors. But the 2-acre property, ringed with woods and right on the highway, near enough to the farm to visit old friends, was Harry's dream. Aileen agreed to its purchase when Harry suggested she could do anything she liked with the interior to make their new home her dream too—a color scheme of white, red and black.

THE Woods began preparing for the move from the old farm house, built in 1849 of pine planks and blocks of clay, to the contemporary, ranch-style brick bungalow.

Aileen started in excitedly to redecorate, furnish, and to some extent remodel the new house. First, a partition was taken out; what had been breakfast room and dining room became an open dining area and family room, set apart by their floor treatment. Tile from the kitchen was carried into the dining area; the warm red of wall to wall carpeting was laid in living room and family room. No hardwood for Aileen!

"With just tile and carpeting, I can clean this house in half the time," she claims, adding that a good, versatile vacuum cleaner is essential.

The furniture had to be comfortable and practical. "We wanted a chesterfield you could sit on in your everyday clothes," Aileen said. "Because we wanted high-backed furniture, the choice was limited to French provincial or colonial. I could only get my colors in the colonial, so that settled that."

The wood of the furniture is a natural-finish maple, resistant to heat and moisture, and easily maintained. Another feature she liked was the foam rubber in the chesterfield and chair cushions. The covers zip off and on for cleaning.

SPEAKING from the satisfaction of her own experience, Aileen recommends seeking out a furniture store which offers a decorating service. Through her store's decorating consultant she gained access to manufacturers and trade showrooms where she found things not in the stores—in her case, a special upholstery covering for the living-room chesterfield and matching two-seater. Covered in an off-white fabric with black line design patterning these pieces provide the black accent she was seeking. One living-room chair, the family room chesterfield, two footstools, and drapery for the windows in the kitchen and dining area feature a colonial print on a red background. A turquoise tone in this print suggested the wall color for the family room, kitchen and dining area. Repainting the entire house in light colors was a family project, although professional painters were hired to do the high gloss areas. For the living room Aileen chose antique white; the bedrooms are soft pastels.

The antique white of the living-room walls is repeated in the drapery at picture windows in the living room and family room, and again in two chairs set at either side of the fireplace. The chairs are covered with simulated leather textured plastic, readily wiped clean with a damp cloth. Furniture from the living room and family room, chosen to harmonize, can be interchanged to accommodate groups and varying family needs, or just for variety.

"For once," Aileen says, glowing with understandable pride, "everything matches!" Through the years, while she nurtured her dream color scheme, some friends were skeptical. Now, none could argue its charm.

"To walk into the living room and look at the sun shining down through the trees . . . it's sort of a golden glow," Aileen mused. Agreeing, I wondered if that isn't a fitting setting for a dream come true.



This conversation corner capsulates the colors: red carpet, off-white walls, black line fabric. [Guide photos]



A double garage 22' sq. extends the contemporary ranch-style bungalow to a 79' length.



Stove features swing-out pan storage. Dining area in foreground shares kitchen floor tile.



A bedroom wall provided the background for one family's favorite photos.

## Home Picture Gallery

by EUNICE M. SCAMMELL

THE yellowing family photographs that used to elbow one another for space on the piano and table tops have no place in today's modern living rooms. If you have portraits or photos stored away in a cupboard or drawer, perhaps you will agree it is rather a pity they can't be displayed where they could be enjoyed.

The accompanying photograph shows an idea we used on a bedroom wall in our home. Several friends liked the idea so well that they have used it themselves in a den, bedroom or recreation room. It can be done quite economically.

I gathered all our favorite family portraits, rescued some wedding pictures from a box full of items we couldn't part with, and we had some interesting photographs enlarged. With a sharp razor I cut the folder cover from the portraits in standing-type folders. This left the mat backing on the picture. Then I measured for frames to encompass picture and mat. The remainder were framed without mat edges. If you prefer, all the pictures may be matted.

I had some old narrow frames in a basement trunk and used those that would fit some of the photos. Removing the glass first, I gave these frames a flat black finish with a small spray "bomb." For the remaining pictures I purchased the narrow frames in a dull black that are available at almost any dime store. Fancier frames could be used but cost considerably more. I had several colored portraits of our children and decided to use them as an accent in the center of the "gallery." For these I purchased several inexpensive frames in a white enamel finish.

As I cleaned and polished the glass for the pictures I found it was helpful to work on a thickly folded bath towel to prevent the glass from slipping or scratching. After inserting the pictures in their corresponding frames, I cut a good weight cardboard backing to fit well in back of each picture. This holds the picture securely and keeps out dust. For 10 cents I bought enough glazier's points to hold the pictures in their frames.

Because these pictures are fairly

light in weight, I found the adhesive picture hangers with one section that fastens on the picture back and the other that fastens on the wall most satisfactory. Once the hangers were on securely the pictures were ready to hang.

To place the pictures in a group arrangement that was pleasing to the eye, I measured the wall space where the pictures were to hang. Taking a roll of string, I measured a corresponding area on a carpet and laid the string to outline the area. Putting the small colored portraits in the middle for accent, I shifted the other pictures around in this space to create the arrangement. Although none of the pictures were identical in size, the frames were uniform and I found I could best balance the arrangement by putting large and small pictures adjacent to one another.

When I had the group most pleasing to me, I sketched it on a sheet of paper, measured the distances between the pictures and noted this on my sketch.

Measuring from baseboard and corners, I marked the center of the wall lightly with a pencil and attached the hanger for the center picture of the group. By following the distances noted on my sketch and marking the spot for each hanger, it was quite easy to hang the remaining pictures.

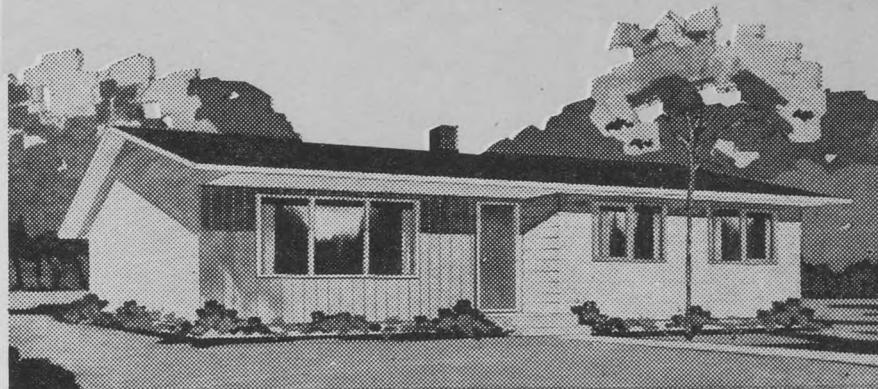
And there was our own picture gallery to enjoy every day. V

### Petit Point

*Spring is a heap of silken floss  
Combed by the wind,  
Dyed by the sun,  
And waiting for the rain needles  
To petit point a picture  
On a dun, jute canvas  
Of bare soil and bleak trees.  
Swiftly the greens are woven in,  
Clothing the crisscross of branches,  
Hemstitching the road's severity.  
Subtly, a splash of bird wing,  
A blur of flower petals,  
A dazzle of azure sky  
And the fleecy wool of a cloud  
Combine to make  
A symphony in color  
On summer's finished tapestry.*

—THELMA E. FOSTER.

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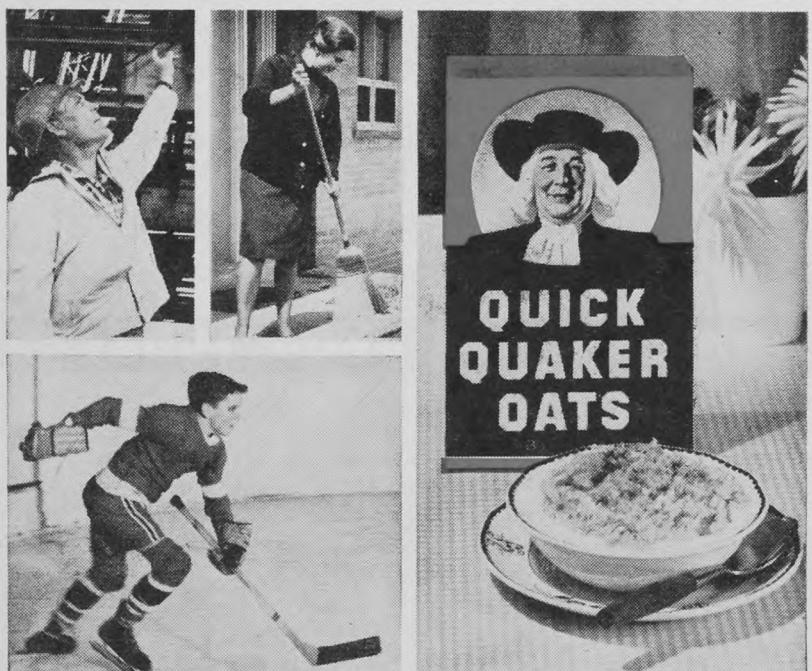
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## IN THE KITCHEN

### Desserts to Whip Up

by GWEN LESLIE  
Food Editor

THE nicest prescription we can suggest for cooks' spring fever will work wonders for March menu doldrums, too! And if your household suffers from neither, well, isn't prevention pretty vital?

Each of the recipes below incorporates air in its whipped ingredient. They borrow a mite of the March wind and fluff it into desserts to tease the eye and tempt the palate. We prescribe these desserts for family meals and for lunches served with tea or coffee to committee group members and visiting friends. The "dosage" we leave to your own discretion.

Whipped cream, a meringue whip of egg whites, and whipped evaporated milk capture the light-and-airiness so welcome after months of winter.

For best results in whipping cream, chill the cream, beaters and bowl. Warm cream does not whip well. Choose a bowl that allows for doubling the volume you can expect when cream is whipped. Should you overbeat the cream slightly, rescue it by adding a little unwhipped heavy cream, beating lightly to obtain the desired consistency.

#### Peach Paradise Dessert

|                               |                                |                                |
|-------------------------------|--------------------------------|--------------------------------|
| 1 large chiffon cake          | $\frac{1}{4}$ tsp. vanilla     | $\frac{1}{2}$ c. melted butter |
| $\frac{1}{2}$ pt. heavy cream | 28-oz. can sliced peaches      | 1 T. grated lemon rind         |
| 3 T. icing sugar              | 1 c. shredded coconut, toasted | 1 T. lemon juice               |

Whip cream; fold in sugar and vanilla. Cut cake in half, horizontally. Cube  $\frac{3}{4}$  cup of the sliced peaches. Toast coconut spread thinly on a cookie sheet in a slow oven at 200°F. Spread some whipped cream and the cubed peaches on the cut surface of the bottom half of the cake. Set the top half in place and spread the remaining whipped cream on the top and sides of the

entire cake. Arrange sliced peaches in a swirl pattern on the cake top. Sprinkle toasted coconut on the sides of the cake and refrigerate until serving time. Yields 12 to 16 servings.

#### Ginger Coffee Cream

|  |                       |
|--|-----------------------|
| $\frac{3}{4}$ c. fine ginger snap crumbs                           | 1 c. milk             |
| 16 large marshmallows or 2 $\frac{1}{2}$ c. miniature marshmallows | 4 tsp. instant coffee |

$\frac{1}{2}$  pt. (1 $\frac{1}{4}$  c.) whipping cream

Crush enough ginger snaps to yield  $\frac{3}{4}$  cup fine crumbs. Cut up large marshmallows using wet scissors.

Scald milk; stir in marshmallows and instant coffee. Stir over heat until marshmallows are melted. Chill, stirring occasionally, until the mixture becomes syrupy.

Whip the cream stiff. Fold the thickened marshmallow mixture into the whipped cream. Spoon layers of coffee cream into parfait glasses or other serving dishes alternately with ginger snap crumbs. Chill thoroughly before serving. Yields 6 to 8 servings.

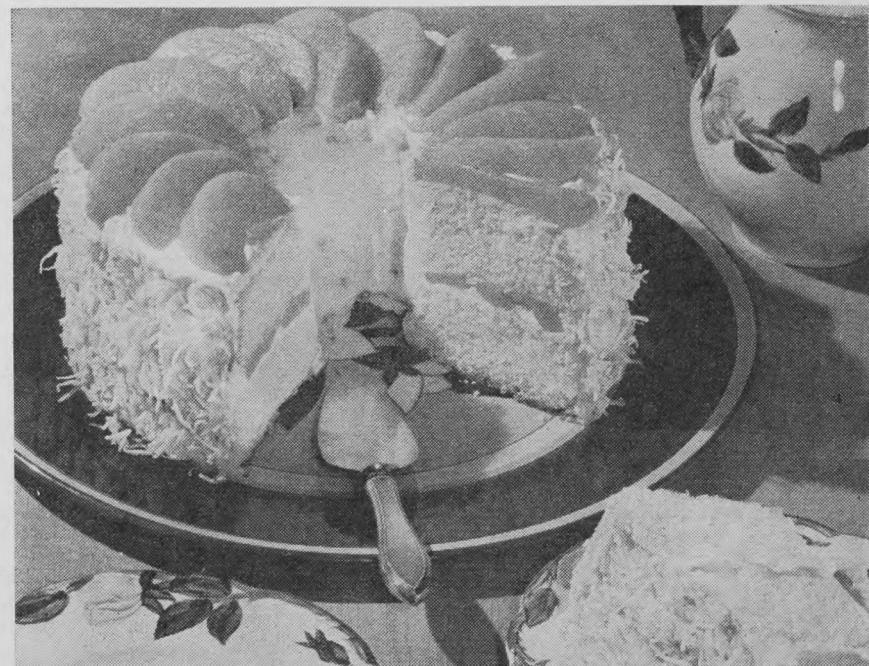
#### Pastel Snow Squares

|   |                                       |
|---|---------------------------------------|
| 3-oz. pkg. straw berry flavored gelatin | $\frac{1}{2}$ c. melted butter        |
| 1 $\frac{1}{2}$ c. hot water            | 1 T. grated lemon rind                |
| 3 egg whites                            | 1 T. lemon juice                      |
| $\frac{1}{4}$ tsp. salt                 | $\frac{1}{2}$ c. heavy cream, whipped |
| 3 egg yolks                             | 1 c. fine graham wafer crumbs         |
| $\frac{1}{3}$ c. sugar                  |                                       |

Dissolve gelatin in hot water; chill until thick and syrupy. Beat egg whites with salt until stiff but not dry. Fold into gelatin, and turn into a 9" square pan. Chill until set.

Meanwhile, prepare sauce by beating egg yolks until thick and lemon-colored, gradually adding sugar. Blend in melted butter, grated lemon rind and lemon juice. Fold in whipped cream. Chill about 1 hour.

When gelatin has set, mark in squares, cut, and roll cubes in graham



[Bakery Foods Foundation photo]  
Golden peach petals swirl 'round on a chiffon cake filled and frosted with a cloud of whipped cream. Toasted coconut adds a crisp and tasty texture.



[National Biscuit Co. photo  
Looking for a light 'n lovely spring dessert? Serve Pastel Snow Squares!]

wafer crumbs. Pile in sherbet glasses or serving dishes and top with sauce. This recipe yields 6 servings. For variety you might like to make up the recipe using different flavors of gelatin and mix the colors in each serving.

#### Banana Peanut Ripple Ice Cream

|  |                                  |
|--|----------------------------------|
| 2 c. diced regular marshmallows (about 20) | 1 T. lemon juice                 |
| 1 large can undiluted evaporated milk      | 2 T. lemon juice                 |
| 3 medium-sized bananas                     | 1/4 c. chunk-style peanut butter |
|  | 1/2 c. liquid honey              |
|  | or light corn syrup              |

Melt cut marshmallows with  $\frac{1}{8}$  cup milk in top of double boiler over hot water. Cool. Mash bananas and add 1 tablespoon lemon juice and sugar. Blend. Add marshmallow mixture and let stand 25 minutes, stirring occasionally. Chill remaining 1 cup evaporated milk in a refrigerator tray until soft ice crystals form around tray edges (about 20 to 25 minutes). Whip the chilled milk until stiff (about 2 minutes). Stir in the 2 tablespoons lemon juice and whip very stiff (about 2 minutes longer). Fold banana mixture into whipped milk and spoon into refrigerator trays. Combine peanut butter with

honey or syrup and blend. Pour peanut butter mixture over banana-milk mixture; cut through with a spatula for ripple effect. Freeze until firm (about 3 hours). Yields about 2 quarts.

#### Graham Cream Torte

|                           |                                    |
|---------------------------|------------------------------------|
| 1 pt. heavy cream         | 54 graham wafers                   |
| 1/2 c. sifted icing sugar | 2 ripe bananas, very thinly sliced |
| 1 tsp. rum flavoring      | 1 c. chopped walnuts               |
|                           |                                    |

Whip the cream with the icing sugar and rum flavoring. Arrange 9 graham wafers in a square on a large serving plate. Spread with a thin layer of whipped cream and top with a layer of sliced bananas. Repeat 4 more times. Top with another layer of wafers. Frost top and sides with remaining cream. Coat sides with chopped nuts, reserving some for decorating the top. Chill for about 3 hours before serving.

#### Heavenly Rice

|   |   |
|---|---|
| 1 1/2 c. cold, cooked rice                      | 1/4 c. well-drained chopped maraschino cherries |
| 1 1/2 c. miniature marshmallows or 1 c. coconut | 1/4 c. chopped nuts                             |
| 1/2 c. well-drained crushed pineapple           | 2/3 c. undiluted evaporated milk                |
| 1/2 c. well-drained crushed pine-apple          | 2 T. lemon juice                                |
|   | 1/2 c. sifted icing sugar                       |

Mix rice, marshmallows or coconut, pineapple, cherries and nuts in a large bowl. Chill the evaporated milk in a refrigerator tray until soft ice crystals form at tray edges (15 to 20 minutes in the freezing compartment). Whip until stiff (about 1 minute). Add lemon juice to milk and whip very stiff (about 2 minutes longer). Beat in sifted icing sugar and fold milk mixture into rice and fruit. Spoon into serving dishes, garnish with fruit or nut pieces, and place in the refrigerator until serving time.

#### Key to Abbreviations

|               |           |
|---------------|-----------|
| tsp.—teaspoon | oz.—ounce |
| T.—tablespoon | lb.—pound |
| c.—cup        | pt.—pint  |
| pkg.—package  | qt.—quart |

## Cooking Crises Do Occur

ALL recipes are not perfect. Agreed. But, by and large, as recipe development and recipe writing is improved, the careful cook can expect uniformly good results each time she prepares a familiar food. The careful cook, in this case, is one who reads the recipe correctly, measures accurately, combines ingredients in the suggested order and manner, and uses the recommended pan size and cooking temperature.

Occasionally, even this paragon of culinary virtue may need to halve a recipe. Or, in common with all curious cooks, she may wish to try a new recipe only to discover ingredients quoted in weights. A table of equivalents such as the one below will prove handy.

#### EQUIVALENTS

|                    |
|--------------------|
| 3 tsp. = 1 T.      |
| 2 T. = 1 fluid oz. |
| 16 T. = 1 c.       |
| 1 c. = 8 oz.       |
| 1 1/4 c. = 1/2 pt. |
| 2 1/2 c. = 1 pt.   |
| 2 pt. = 1 qt.      |
| 1 qt. = 5 c.       |

Asparagus, 1 lb. = 16 to 20 stalks  
Bananas, 1 lb. = 3 medium  
Bread crumbs, dry, 3 oz. = 1 c.

|  |
|--|
| Butter, lard, 1 lb. = 2 c.                 |
| 1 oz. = 2 T.                               |
| Vegetable shortenings, 1 lb. = 2 1/4 c.    |
| Cheese, Cheddar, 1 lb. = 4 c. grated       |
| Cottage, 1 lb. = 2 c.                      |
| Raisins, seeded, whole, 1 lb. = 3 1/4 c.   |
| Raisins, seedless, whole, 1 lb. = 2 3/4 c. |
| Dates, pitted, cut, 1 lb. = 2 1/2 c.       |
| Eggs, whites, 1 c. = 8 to 11               |
| yolks, 1 c. = 12 to 14                     |
| Flour, all-purpose, 1 lb. = 4 c.           |
| cake, pastry, 1 lb. = 4 3/4 c.             |
| 100 grams = 1 c. sifted                    |
| wholewheat, 1 lb. = 3 3/4 c.               |
| Lemons, 1 medium, juice = 3 T.             |
| rind = 1 to 2 T.                           |
| Peas in pod, 1 lb. = 1 c. shelled          |
| Potatoes, 1 lb. = 3 medium                 |
| = 2 1/2 c. diced                           |
| Rice, white, uncooked, 1 lb. = 2 1/8 c.    |
| = 7 c. cooked                              |
| 2 T. raw = 1/2 c. cooked                   |
| Sugar, brown, packed, 1 lb. = 2 1/8 c.     |
| granulated, 1 lb. = 2 1/4 c.               |
| icing, sifted, 1 lb. = 3 1/2 c.            |
| Tomatoes, fresh, 1 lb. = 4 small           |
| Vegetables, frozen, 10 to 12 oz. pkg.      |
| = 1 1/4 to 2 c.                            |
| = 3 to 4 servings                          |

Again, in the best of well-run households, crises occur. The cupboard is bare of one of the ingredients called for. What to do? Refer to the following list of substitutions.

(Please turn to page 69)



## ROLLED OAT BREAD

When you bake at home use the yeast you can count on ... Fleischmann's Active Dry Yeast, for baking at its best! Try this home-baked-good

Rolled-Oat Bread with its nutty flavour and moist—yet light—old-time texture! Just follow this simple step-by-step recipe:

**You'll need:** 2 c. milk, 2 c. rolled oats, 2 tbsps. granulated sugar, 2 tsps. salt, 2 tbsps. shortening, 2 tbsps. molasses, 1/2 c. lukewarm water, 1 tsp. granulated sugar, 1 envelope Fleischmann's Active Dry Yeast, 3 3/4 c. (about) pre-sifted all-purpose flour.

**1.** Scald milk. Combine rolled oats, the 2 tbsps. sugar, salt, shortening and molasses; stir in scalded milk. Cool to lukewarm.

**2.** Meantime, measure lukewarm water into a large bowl; stir in the 1 tsp. sugar. Sprinkle with yeast. Let stand 10 mins., then stir well. Stir in lukewarm oat mixture and 1 c. of the flour. Beat until smooth and elastic. Work in sufficient additional flour to make a soft dough—about 2 3/4 c. more.

**3.** Knead on floured board until smooth and elastic. Place in greased bowl. Grease top. Cover. Let rise in a warm place, free from draft, until doubled in bulk—about 1 1/4 hours.

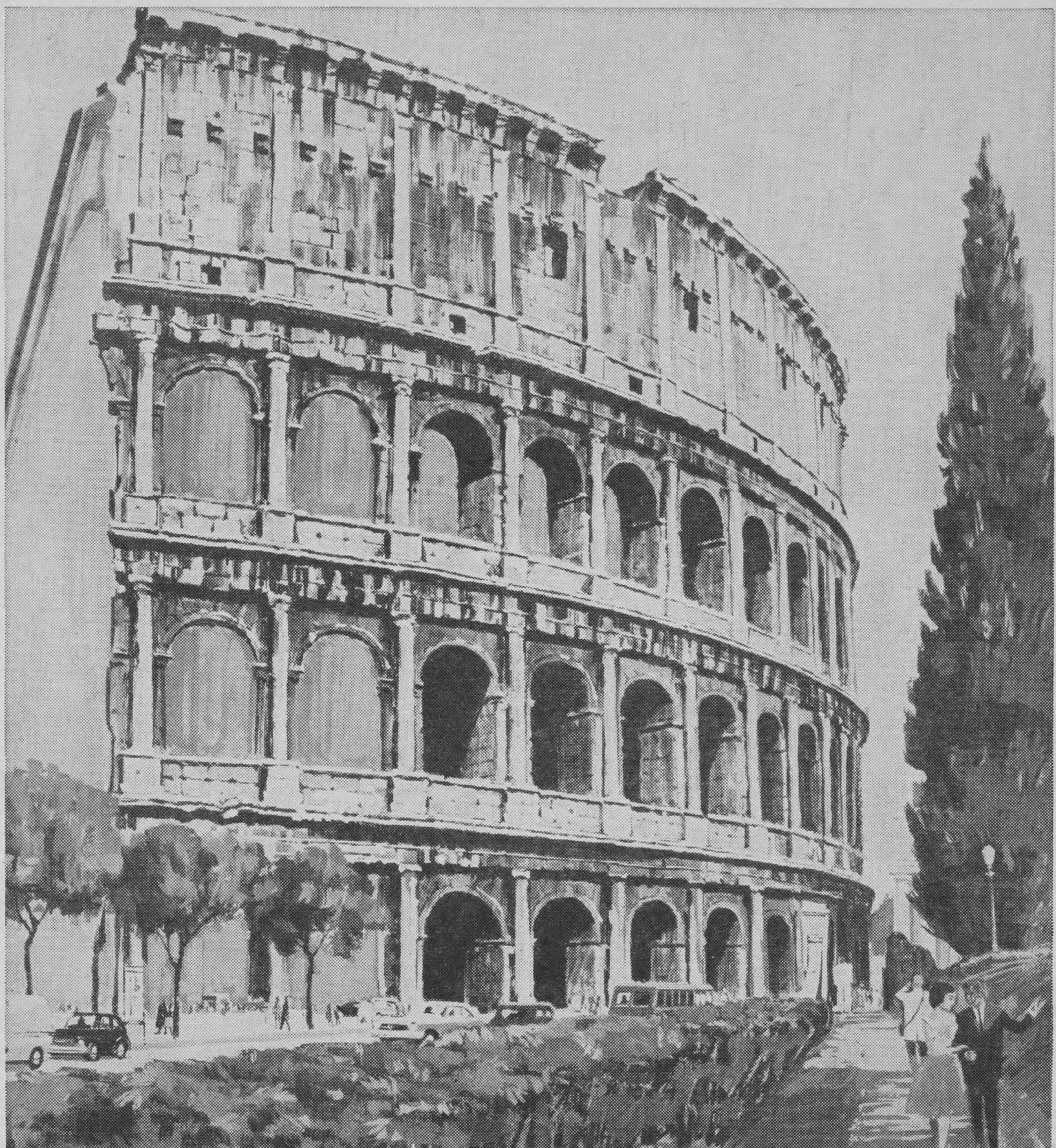
**4.** Punch down dough. Turn out and knead until smooth. Divide into 2 equal portions. Cover with a tea towel and let rest 10 mins. Shape each portion into a loaf and place in a greased loaf pan (4 1/2 x 8 1/2 inches, top inside measure). Grease tops. Cover. Let rise until doubled in bulk—about 40 mins. Bake in a hot oven (400°) 45 to 50 mins. Makes 2 loaves.

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**THE INTERNATIONAL NICKEL COMPANY OF CANADA, LIMITED**  
55 YONGE STREET, TORONTO

(Continued from page 67)

In an emergency such as this, something you have may stand in for something you do not. The end product, while not identical, should be generally satisfactory.

#### SUBSTITUTIONS

|   |   |
|---|---|
| 1 tsp. baking powder                                    | = 1/4 tsp. baking soda plus 1/2 tsp. cream of tartar  |
| 1 c. butter   | = 1 c. margarine<br>= 7/8 to 1 c. hydrogenated fat plus 1/2 tsp. salt<br>= 7/8 c. lard plus 1/2 tsp. salt |
| 1 oz. (1 sq.) unsweetened chocolate                     | = 3 T. cocoa plus 1 T. butter   |
| 2 T. cornstarch in thickening 1 c. liquid to a soft gel | = 1/2 T. unflavored gelatin<br>= 1 large egg<br>= 2 egg yolks   |
| 1 egg (in a batter)                                     | = leavening power of 1/2 tsp. baking powder   |
| 1 whole egg   | = 2 egg yolks plus 1 T. water (cookies, etc.)<br>= 2 egg yolks (custard)                                  |
| 1 T. flour (for thickening)                             | = 1/2 T. cornstarch<br>= 3/4 T. quick-cooking tapioca<br>= 1/2 T. potato flour                            |

|                              |   |
|------------------------------|---|
| 1 c. all-purpose flour       | = 1 c. plus 2 T. cake and pastry flour  |
| 1 c. sugar                   | = 1 c. brown sugar, well packed<br>= 3/4 c. honey (reduce liquid by 3 T.)<br>= 1 1/2 c. molasses (reduce liquid by 1/2 c.)<br>= 2 c. corn syrup (reduce liquid by 2/3 c.)<br>= 1 1/2 c. maple syrup (reduce liquid by 3/4 c.) |
| 1 c. whole fresh milk        | = 1/2 c. evaporated milk plus 1/2 c. water<br>= 4 T. skim milk powder plus 1 c. water plus 2 T. butter  |
| 1 c. sour milk or buttermilk | = 1 T. vinegar or lemon juice plus sweet milk to make 1 cup   |
| 1/2 lb. fresh mushrooms      | = 1 c. cooked<br>= 10-oz. can   |
| 1 c. chopped fresh onion     | = 1/4 c. instant minced onion   |
| 1 c. sliced fresh onion      | = 1/4 c. dried onion flakes   |
| 1 c. ground fresh onion      | = 1 T. onion powder   |
| 1 c. canned tomatoes         | = about 1 1/3 c. cut-up fresh tomatoes simmered 10 minutes  |

Note: Many substitutions can only approximate the ingredient called for in the recipe because of differences from one brand to another, as in cocoa some brands of which contain more fat or have a deeper color than others. ✓

## Appliance Wise

(Fifth in a series)

**Washing Machines:** Automatic. Empty all pockets and remove any pins, buckles or other sharp objects from clothing before washing to prevent scratching the inside of the machine. Do not use dry cleaning liquids in your washer. Liquids other than water can damage the finish. After washing non-fast colored fabrics, clean the washer by filling it half full of water, then allowing it to complete a washing cycle.

After washing, turn off both hot and cold water taps to relieve pressure on the hoses. Remove the agitator occasionally and wipe it and the post. Automatic models are self-cleaning. If yours has a lint filter, clean it after each load. Leave washer door open for ventilation when machine is not in use. Do not store clothes in the washer between washings.

**Non-Automatic or Wringer Type.** Drain tub immediately after washing; rinse both agitator and tub and wipe dry with a clean cloth. Remove agitator periodically for thorough tub cleaning; remove lint and soap scum from agitator. Leave cover slightly ajar to prevent a musty odor. Wipe rollers and wringer frame dry after use, and wipe rollers again before using. Rollers may be washed with detergent and water. Do not use kerosene or solvent which will damage the rubber. Follow manufacturer's directions for oiling.

**Dryers:** Dry "damp-dry" items first so you can get an early start on ironing while slower-drying fabrics such as bath towels and mats are drying. Colors that may be washed together may be dried together. Two dish cloths sewn into a bag used to hold small articles for washing and drying permit you to pick up many pieces with one motion.

Avoid overdrying which causes wrinkling and fabric harshness. Fabrics feel damper in the dryer than they are.

To clean drum, wipe with a damp cloth. Clean lint trap after each use, and leave door open for ventilation.

**Electric Ironer.** The ironer should stand in warm, not cold, place. Keep

the shoe clean. When cool, rub with a damp cloth, then wipe dry. If roller padding is removable, take it off occasionally, fluff it (an automatic dryer does a good job), reverse it and replace. Change the muslin roller cover when soiled. To prevent padding from packing, distribute ironing over the entire surface. Turn buttons, hooks, etc., to face the padded surface, saving buttons as well as shoe.

**Steam and Dry Irons.** City tap water may be used in a steam iron. The lime deposits formed over 6 to 8 years will eventually clog the steam outlets and should be cleaned by an appliance service department.

In the country, rain water, distilled water or demineralized water should be used in steam irons. A demineralizer may be purchased from appliance or department stores. Three to four gallons of water may be demineralized by passing through its plastic tube filled with chemicals.

Only distilled water should be used in combination spray and steam irons.

Do not use vinegar to clean the inside of a steam iron. It attacks the aluminum lining and corrodes the inside.

Disconnect the iron before filling or emptying. Empty iron after each use while it's still hot. Save any unused distilled water.

Whatever the fabric, use the steam setting for steam ironing. Sputtering indicates the iron has not heated to the correct temperature. A new iron may sputter in first use even after heating; if it continues, however, the thermostatic control may need resetting. Empty water from iron while doing dry ironing.

Avoid ironing over buttons, zippers, hooks, etc., which may scratch the soleplate. If plastic or synthetic material melts on the soleplate, heat the iron to a high temperature and rub over salt on brown paper, or clean with a mild, non-scratching household cleanser.

Cool irons thoroughly before storing, then set on heel rest with cord loosely wound round the iron. ✓

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## Discipline . . .

## Guide to Good Behavior

by GLORIA LOGAN

ARE we afraid to discipline our children? If, by discipline, we mean the simple correction necessary to any growing child, the answer is “yes.” Many modern parents are afraid to discipline their young offspring. They are afraid they will turn the child against them; afraid that other parents will consider them tyrannical, afraid of the psychiatrist, the neighbors, and themselves. Perhaps they are even afraid of their children.

How do I know this? Because I've been making a little survey of my own. For about a year now I've been studying the children I meet. And I know that the child of today is getting away with things that in my day—and that's only 25 years ago—I would have been slapped for just thinking about doing.

The main trouble seems to be that parents don't follow through when they attempt to discipline their children. They say, “If you do that again I'll send you to your room,” but they stop there. The child does it again, and nothing happens. Mother is busy talking or working and when she doesn't carry out her threat of punishment, the child knows she didn't mean it. By and by, these threats become so meaningless that they go in one ear and out the other, and the child does what it wants to do.

Parents, today, seem to be uncertain of themselves. When they speak to a child in order to make it behave, they are not firm enough. They are not sure whether the child is going to do it without an argument or fuss, and their uncertainty betrays them.

“You may as well let him have it,” the father of a 2-year-old boy said to the child's mother. “If you don't he'll make such a fuss there'll be no living with him.”

That's another reason why parents don't want to discipline their children. They don't like the tears and the tantrums that sometimes follow. It's more peaceful to take the easy way out, at least for the parents.

UNDISCIPLINED children are not happy children. They whine and fuss and demand all the time. They don't know where they stand.

Different ages need different kinds of discipline. What is suitable for the pre-school child will not do for the pre-teenager. But what is discipline, really? Simply the rules for regulating conduct, a kind of corrective training for life. It is not brutal or harsh. It should never take the form of cruelty. Going to bed without supper, whippings, depriving a child of a promised treat are, or should be, unnecessary. Learning to discipline a child is simply the act of learning to control its more wayward and objectionable tendencies.

Who makes the family rules, one parent or both? Well, in most homes

it seems to fall to the mother, partly because most fathers are not at home during the day. But no matter which parent carries out the disciplinary program, the results should be the same. And one parent should not interfere when the other is correcting the child.

Neither should the father be held up as a sort of bogeyman. How often have you heard a distracted mother say to a misbehaving child “Wait until your father comes home. . . .” This is not fair to the father or to the child. A father ought to be a loved companion; not a threat hanging over a child's head.

Of course, some parents never have disciplinary problems. They are such tyrants that the children walk on tiptoe and live in fear every day. That's just as bad as being too lax. But somewhere there must be a happy medium. Parents can find this medium if they give the problem of discipline some good constructive thought.

TRAINING a child to be a good citizen starts early, and it starts in the home. Start by teaching your child that he is expected to pick up his toys. Later, he will learn to keep his room tidy.

Instead of making a great many rules, have a few simple ones, and expect your child to abide by them.

Don't threaten to punish a child, if you don't intend to follow through.

Insist upon co-operation with your spouse or other adults living in the home. Junior is supposed to pick up his own toys, not grandmother or auntie!

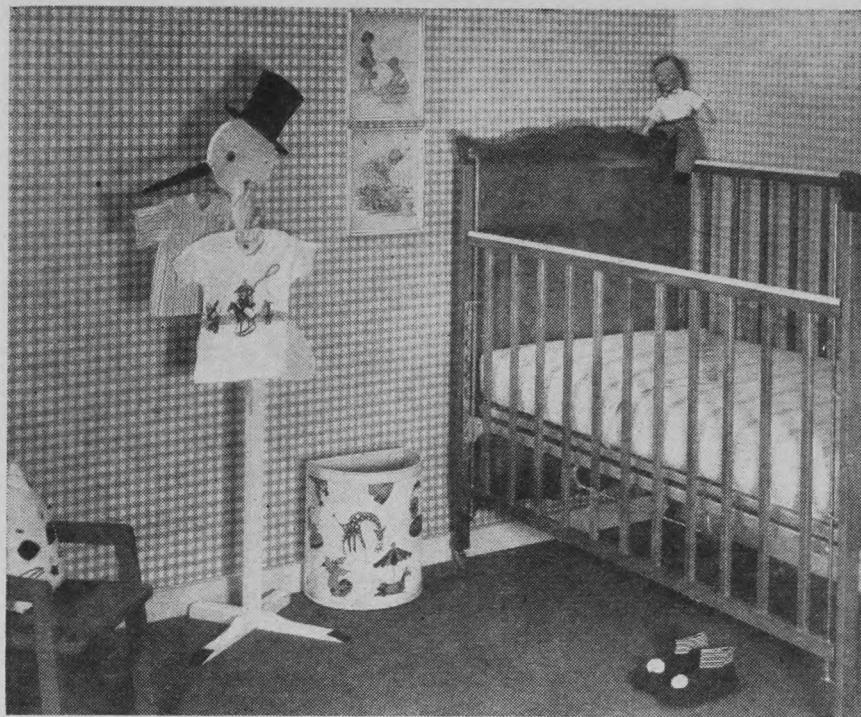
Above all, strive for that good will which makes for a happy family life. If you tell your child why he must do a certain thing, or stop doing it, chances are he'll understand and co-operate.

These simple rules may help you:

1. Establish limits of behavior.
2. Adapt the limits to the age of the child.
3. Maintain these limits as consistently as possible.
4. Explain to the child “why” it is necessary for you to establish limits.
5. Re-examine these limits often.

If your child does not learn discipline at home, it will be difficult for him to adjust when he goes to school. Other children are not very tolerant of shortcomings in their playmates. Most children get along splendidly when they know what is expected of them. They do have to be taught how to behave and that is a full-time job.

If you teach them well, your reward will be great because there is deep satisfaction in bringing up a well-mannered child. To achieve this my advice is: don't be afraid to discipline your child.



[Miller photo]  
Washable checked wallpaper and a durable carpet make a practical and attractive background for a crib that is styled to blend with any decor. Story book prints and circus motifs add their child-like charm to this nursery.

## A Room to Grow In

IS it nursery planning time in your home? A child's room requires the same amount of thoughtful planning that you give to the other rooms. First of all, try to select furniture and accessories that will grow with the child. This suggests furniture with clean, contemporary lines and surfaces that are easy to care for. If you choose furniture that is classical in style, such storage pieces as chest and dresser will continue to serve a growing youngster long after he has outgrown the matching crib.

Color, of course, can give the nursery its own character and individuality. If you use the rug as the key to the room's color scheme, choose one that will blend with the furniture. Since this rug will be subject to considerable wear, shop for a long-wearing one that requires a minimum amount of care. You'll likely keep this rug for many years. For this reason, choose a neutral color. Then it will blend with many types of furniture and a wide variety of colors.

Animal motifs are as popular as ever in decorating children's rooms. Cuddly bunnies or ducklings are still popular but you can now find yawning hippos or mournful hound dogs.

Wallpaper can make the room charming and delightful; or leave it lacking in personality and warmth. If you decide on wallpaper, choose one that is both sturdy and washable. Some of the newer wallpapers are plastic-coated, colorfast and guaranteed washable. The initial investment for this type of wall covering may seem large, but it will give years of service.

Vinyl tile makes an extremely practical and attractive floor covering in a nursery. It comes in a wide range of patterns and colors. The newest tiles encourage mix-and-match combinations—two-tone checkerboards, hexagonal patterns, border motifs, solid-color tile floors accented with occasional tiles in a brightly patterned design. In other words,

you can custom-design the floor to co-ordinate with the room furnishings. Select it, too, with the needs of a growing child in mind.

Conventional white sheets and pillowcases are giving way to printed nursery linens, many of them contoured in style. They fit well and are easy to change. One attractive contoured sheet with a rosebud design can double as a spread.

AS a youngster grows, give him a special place to do his writing. You might hang a blackboard on a wall at a convenient height and supply him with a box of white and colored chalk and an eraser. You might cover a closet door with a blackboard, or paint the door with blackboard paint.

If you have a young cowboy in your family, make a bedspread for his room by sewing red or blue (or the two colors in combination) bandana handkerchiefs together. Finish the edge with light-weight rope or cotton cording.

Try using alphabet blocks instead of knobs on the chest or dresser in your child's room. He'll enjoy them. When he is older, they can be replaced with the original knobs.

If two children share one clothes closet, paint one-half of the closet walls and ceiling one color; use another shade for the other half. If you use the children's favorite colors, they're much more likely to keep their belongings "within bounds." Clothes rods and hangers might be identified in the same way. V

### Wash

*The moon is hanging her wash in the sky;  
You can see the whiteness as you pass by.  
The moon's clothesline is the Milky Way  
And the wash is the stars themselves, folks say.*

—NORMA McLAIN STOOP.

## Homemakers' Hints

I use an empty window spray bottle for dampening clothes. It does an even job and makes ironing easier. —Mrs. Art Smith, Baddeck, N.S.

To cream one cupful or more of butter or shortening, use your potato masher. A few strokes will produce a nice, creamy texture.

I sew a seam with elastic thread at the waistline of blouses to keep them snugly inside skirts.—Ann G. Ryatt, Mistatin, Sask.

**Note:** After reading Homemakers' Hints (January 1963), a spokesman for The Arborite Co. writes "We feel that the reference to being heatproof requires some qualification. For example, Arborite is guaranteed to withstand boiling water temperatures. However, hot frying pans, baking dishes from the oven, or active electric appliances should be separated from Arborite surfaces by a protective insulating pad."—Ed.

## "I Was Warned About The CATHOLIC CHURCH!"

My relatives and friends were shocked when they heard I was studying to become a Catholic.

With complete sincerity...and a genuine concern for my welfare...they set out to show me what a terrible mistake this would be. And as I look back now, I realize that if all the things they believed about the Catholic Church were true in fact, I would indeed have been making a great mistake.

But the important fact is, the things they thought to be true were not.

Having been a non-Catholic myself until early manhood, I can understand the viewpoint of these people. And most of them, I realize, are prompted in their beliefs not by malice, but by grievous misunderstanding. And I am reminded of Christ's words to the Apostles: "...yea, the time cometh, that whosoever killeth you will think that he doeth God service" (John 16:2).

They sent me all sorts of pamphlets and tracts condemning the Catholic teaching on the Sacraments, on Baptism, salvation and other topics. There was, in these pamphlets, a remarkable lack of agreement as to the "correct" doctrine. They were in accord only in one thing — their opposition to the Catholic doctrine.

I have come a long way since I first looked at the Catholic Church through non-Catholic eyes. I am a convert to Catholicism, and I can, with knowledge, reason and fairness, discuss both sides of "The Catholic Question."

I have not, as my non-Catholic friends predicted, lost the slightest degree of religious freedom. I am not held to my faith by bonds of fear or superstition. The Catholic Church does not corrupt the Scriptures...does not deprive me of direct access to God...does not try to substitute a man-made system for



the true religion of Jesus Christ. On the contrary, it has consistently taught what I am convinced are the true teachings of Jesus.

Not all of those who heard Christ's words from His own lips could believe what He said. Many of His disciples "...went back, and walked no more with Him" (John 6:67). It would, therefore, be presumptuous of me to think that all who read this will share my conviction that the Catholic Church is "the church of the Living God, the pillar and ground of the truth."

For the benefit of sincere and fair-minded people who want to know the Catholic Church as it is, I have written a pamphlet discussing many things about the Catholic Faith which most disturb and confuse those on the outside. A copy is yours for the asking. It will come to you immediately and nobody will call on you. Write today for Pamphlet CY-43.

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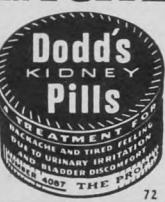
## Woman Relieved of Agonizing ITCH

"I nearly itched to death for 7½ years. Then I found a new wonder-working creme. Now I'm happy," writes Mrs. P. Ramsay of L.A. Calif. Here's blessed relief from torture of agonizing itch in women, chafing, hemorrhoids, rash and eczema with an amazing new scientific formula called LANACANE. This fast-acting, stainless medicated creme kills harmful bacteria germs while it soothes raw, irritated and inflamed skin tissue. Stops scratching and so speeds healing. Don't suffer! Get LANACANE at druggists."



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## The Yellow Bedsock

by JONQUIL TREVOR

OLD Hoot (who was an owl) sat up in the darkness and gave a peevish grunt. He felt for the tassel on his nightcap and tweaked it. Then he reached out and lit the small red candle on his bedside table. Next he blinked at the shadows across his ceiling. By that time he knew perfectly well what was the matter.

"Drat!" said Old Hoot.

For one of his toes—the biggest one on his left foot—was numb with cold. And Old Hoot realized that if he hadn't been too lazy to darn his bedsock, that large toe wouldn't be sticking out of the hole, at the mercy of any stray breeze that happened to blow.

"Botheration!" muttered the owl, as he stumped crossly out of bed to shut the window. The chill night air ruffled his feathers, and he was very glad to snuggle under the bedclothes again. Ten minutes later his toe was colder than ever.

"Really," he exclaimed to himself, "this is *too* much! I shall have to block up the chimney!" So he tumbled out of his nice warm bed for the second time, and stuffed a bundle of paper and three old nightshirts into the sooty black hole.

"That's more like it," said Hoot at last. "Now perhaps I shall get some sleep." Shivering from his silly old head to his toes, he hopped quickly in between the blankets.

It wasn't a bit of use.

He tried wiggling his toe about, but that made him wider awake than ever. He tried tucking his cold big toe under his wing, but this wasn't an easy thing for an owl to do, as he realized when he fell out of bed with a bump.

"It wasn't the window, and it wasn't the chimney," he muttered crossly, as he sat on the floor and glared at the moonbeams. "Then it must be the door!"

He bounced grumpily about his chilly room, collecting all the spare blankets and curtains and rugs he could find, and draped them around his little wooden door.

"Now," he said, as he thumped his way back to bed, "now, perhaps I shall snatch a wink or two."

By this time he was not only very cold all over, but he wasn't the least bit sleepy. He was also the worst-tempered owl this side of Windy Wood (where all the really bad-tempered owls live).

Just as the morning sun came peering into his room, Old Hoot gave one final snort, threw his ragged bedsock straight out of the window, and put both his feet into the other one.

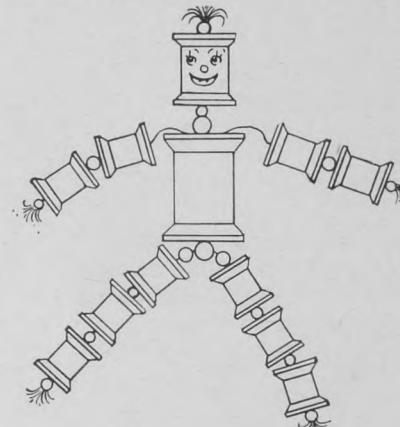
In two trices he was fast asleep.

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## Spool Man

This spool man is strung together with heavy cord and brightly colored beads. You will need one large spool for his body, one medium-sized spool for his head, and 10 small spools for arms and legs. String



these spools quite loosely (as shown in the picture). Fringe the cord at end of legs, arms and head. Then paint your spool man in gay colors. —Maude E. Hallmer. ✓

## Stairway Words

by LAURA D. CROCKETT

Here are some "stairway" words to test your skill. Just add the letters that are needed to make the words for which we've given you the clues.

|    |   |     |   |   |   |
|----|---|-----|---|---|---|
| 1. | A | M   |   |   |   |
| 2. | S | A M |   |   |   |
| 3. | S |     | M |   |   |
| 4. | S |     |   | M |   |
| 5. | S |     |   |   | M |

3. To shut noisily
4. Water vapor
5. A shrill cry

### Answers

3. Slam; 4, Steam; 5, Scream.

## Lazy Wind

The washing hung too limp and quiet  
Beneath the summer sun,  
Until the four winds breezed along  
And thought it would be fun  
To dress up in the drying clothes,  
So North Wind, with a shout,  
Slipped into Mother's dotted dress  
And fluffed the ruffles out.

West Wind tried on my overalls,  
Oh, how he kicked and pranced!  
East Wind, in Grandma's dressing gown,  
In stately circles danced,  
But sleepy South Wind wrapped himself  
From feet to lazy head,  
In a soft bed spread swaying there,  
And calmly went to bed!

—FRANCES GORMAN RISER

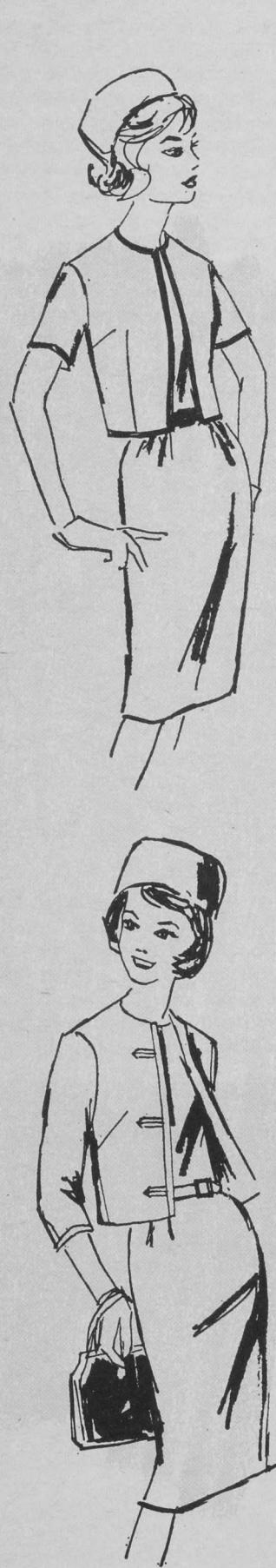
## Don't Disturb!

I found a turtle by the lake;  
His shell was shut up tight.  
I knocked politely, calling: "Sir,  
The day is nice and bright,  
So won't you talk to me a while?"  
He poked his head out. "No,"  
He said, "I'm busy looking at  
A television show!"

—FRANCES GORMAN RISER

# The Jacket Dress

No. 2636. A short-sleeved, waist-length jacket with contrasting trim fits easily over a slim basic dress with shallow neckline, self-belt. Sizes 14, 16, 18, 20, 40, 42, 44; 70¢.



2636



No. 2636. A short-sleeved, waist-length jacket with contrasting trim fits easily over a slim basic dress with shallow neckline, self-belt. Pattern includes belt and matching hat. Girls' 2, 3, 4, 5, 6; 60¢.



2660



2653

No. 2653. Braid trims a collarless, Princess panel dress worn with its own box jacket and matching hat. Jacket and hat are bound with dress fabric. Girls' 2, 3, 4, 5, 6; 60¢.



2650

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Pattern No. \_\_\_\_\_ Size \_\_\_\_\_ Price \_\_\_\_\_

Pattern No. \_\_\_\_\_ Size \_\_\_\_\_ Price \_\_\_\_\_

To \_\_\_\_\_

No. 2634. Ribbon trims this waist-length jacket. The shallow-necked bodice may also be combined with an alternate full skirt style (unpressed pleats). Miss sizes 10, 12, 14, 16, 18, 20; 70¢.

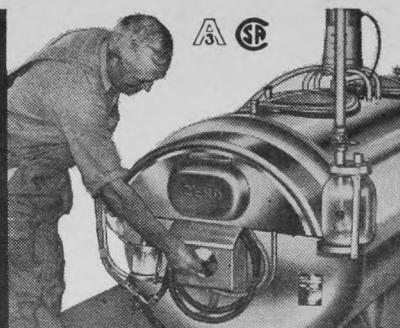
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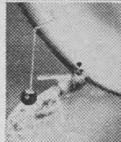
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### Clues to Camping

WHEN Scouts gather together their talk almost always turns to camping. For example, some Manitoba Scouts are already planning a canoe trip for next year that will take them deeper into the province's north country than they have ever been before. Queen's Scout Keith Love is one of them.

Successful camping trips, of course, come from a combination of training and experience. Keith has had a lot of both and this was our reason for seeking his advice.

First we talked about campsites. Keith points out that the choice of campsite is important. When he and his fellow Scouts go camping, they look for a well-drained site where air circulates freely. They also look for good sources of wood, water and shade. If they are fortunate enough to camp on or near any of our inland waters, they look for a safe swimming area. On waterway trips they choose protected anchorages or shelving beaches for their canoes.

Next we asked about camp fires. Keith's experience has taught him to build a fire to suit the need. Under normal conditions a small fire is usually best for cooking. If the fire is intended for warmth or reflector baking, it's wise to try to build it in front of a large rock.

A certain amount of preparation is necessary before the fire is built. An area about five feet in diameter should be cleared down to the ground. This way the fire can be built on solid ground. It's safer that way. It is also a good idea to build some sort of enclosure for the fire, especially a cooking fire. Next, it's necessary to gather up a good supply of fuel—tinder, small and large branches. A fire should never be unattended.

There are several ways to start a fire. According to Keith, the easiest way is to arrange a small bundle of

small dry twigs in the shape of a wigwam with birch bark as tinder. However, birch bark should not be stripped from living trees. Because air is as necessary to a fire as fuel, crisscross the wood as you add it to leave air spaces. Then feed it constantly until you get a bed of coals.

Choice of firewood is important, too. Woodsmen like Keith know from experience that the dead branches on trees are usually drier than those on the ground and that limbs without bark are usually drier than those with bark. Lightweight woods (pine, spruce, willow) ignite more quickly and burn more rapidly than heavy woods (such as oak). Keith also reminded us that a split stick with sharp or splintered edges takes fire more rapidly than an unsplit, round stick. Scouts know this as a "fuzz" stick.

He gave us one more reminder about campfires: the importance of seeing that fires were safely out. Scouts do this by dousing fires thoroughly with water and soil. Then the logs are turned over to make sure they are not smouldering underneath. Finally, the ashes are stirred to make doubly certain that the fire is out.

Campsites are like houses: they need house rules too. Scouts set a good example in the way they dispose of trash. They "burn, bash and bury cans in a dry pit;" they dispose of surplus cooking fat in grease pits dug for that purpose. This is part of their camp routine to try to leave campsites cleaner than they found them.

Camping means the sight of sunlight on rippled water, the sight and sound of beans and bacon sizzling over the fire, the smell of wood-smoke on crisp, clear air, the blending of voices around a fire. Why not perpetuate these pleasures by using our outdoors wisely and well? ✓



If you plan to camp you need to know how to build a safe cooking fire such as the one being shared by Scouts and Cubs on a joint expedition.

## What's Happening

(Continued from page 9)

drain on the public treasury. Speaking to this, PFRA deputy director Harry Hargrave said his organization was happy to see this resolution. Mr. Hargrave, who will be responsible for PFRA's expanded community pasture program, said that grass should be "fully competitive."

In another resolution, the 1,600-member WSGA went on record as being opposed to a feed grain subsidy to Eastern feeders. Said one member: "This subsidy is a carryover from wartime to encourage beef production in Eastern Canada. Like most subsidies, it was never removed. I object to paying good money out of my pocket so that Eastern farmers can compete with me."

Members also requested that Federal and provincial governments allow compensation for death losses on experimental cattle belonging to a farmer or rancher.

### MANITOBA EXPANDS CROP INSURANCE PROGRAM

Manitoba's Minister of Agriculture, the Hon. George Hutton, has announced the establishment of a sixth crop insurance test area in the Brandon - Rivers - Minnedosa region. The addition of this new area will bring 30 per cent of all insurable farms in the province under the test program.

The purpose of the test areas is to determine the feasibility of a province-wide crop insurance program. Coverage under the plan is based on 60 per cent of the long-time average yield of the various cereal crops in each test area. Crops are insured for losses incurred from hail, drought, excessive rainfall, frost, wind and disease.

### APPOINTED TO NEW RESPONSIBILITIES

The Federal Minister of Agriculture, the Hon. Alvin Hamilton, has announced the appointment of new personnel to two key agricultural positions.

Dr. J. A. Anderson, one of Canada's top agricultural scientists, has been named Director General of the Research Branch of the Canada Department of Agriculture. He succeeds Dr. R. Glen whose appointment to Assistant Deputy Minister (Research) was made some months ago. Dr. Anderson is best known for his work as chief chemist and director of Grain Research Laboratory of the Board of Grain Commissioners at Winnipeg.

George Owen, a man with wide experience in the farm loan field, has been named Chairman of the Federal Farm Credit Corporation. He has been acting chairman since the retirement of Brig. T. J. Rutherford. Mr. Owen joined the Canadian Farm Loan Board, predecessor to the FCC, in 1950, after serving several years with the Veterans' Land Act Administration. He hails from Quebec and is a graduate in agriculture from Macdonald College.

### NEW HOG GRADING STANDARDS ASKED FOR

Speaking to the annual meeting of the Meat Packers Council in Cal-

gary in February, hog producer Jack Perkins, Wainwright, Alta., suggested that new hog grading standards be set up which would permit the consumer to pay a price difference for better quality pork, and that hog quality premiums paid by the Federal government for Grade A hogs should be abolished.

Said Mr. Perkins: "The present Canadian hog grading standards were set over 20 years ago to fit bacon exports to Great Britain. These standards place the emphasis on maximum carcass length and minimum fat thicknesses. If processors, producers and government agricultural officials were to meet together and come up with new and realistic standards, hog growers would then be able to produce the kind of pork consumers want."

"A complaint which often reaches the hog producer is that the pork chops are too small," he continued. "In many instances the grower has gone to such extremes in length to fit the Grade 'A' requirements that it has neither fat nor lean. Many years ago we were told that carcass premiums would result in more A's and fewer C's. The premiums have failed in this respect."

At the same meeting, W. A. Mill, general provision manager, Swift Canadian Co. Ltd., also suggested a shift in emphasis in our hog grading standards, but cautioned against being stampeded into a lot of ill-considered changes.

Said Mr. Mill, "It would be folly

to classify our whole grading system as obsolete and thereby lose much of the good it now contains.

"The number one problem in Canadian hogs is fat. The external fat on hams, loins and shoulders should be greatly reduced and hog conformation should be improved to



## MEN PAST 40

Troubled with GETTING UP NIGHTS  
Pains in BACK, HIPS, LEGS  
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Neglect of Glandular Inflammation often leads to premature old age, and incurable conditions. The past year, men from 1,000 communities have been successfully treated here at Excelsior Springs. They have found soothing relief and a new outlook on life.

The Excelsior Medical Clinic, devoted to the treatment of diseases peculiar to older men by NON-SURGICAL Methods has a New FREE BOOK that tells how these troubles may be corrected by proven Non-Surgical treatments. This book may prove of utmost importance to you.

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Are you always tired, weak, worn-out, look older than your years, because of an iron deficiency? If you lack blood-building iron and want to help restore energy, vim, vitality, try Ostrex Tonic Tablets. Also supplies vitamin B<sub>1</sub>, calcium, phosphorus. If run-down condition has aged you, Ostrex may help you regain your younger feeling. 8-day "get-acquainted" size costs little. All druggists.

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when your children  
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put more lean meat into the high-priced cuts."

Keith Leckie, Meat Packers Council general manager, said that there seemed to be a tendency to look upon the livestock industry simply as an outlet for periodic grain surpluses. "The key to developing stable and expanding markets for meat products must be based on a continuous and

orderly flow of quality livestock to market at competitive prices," he stated.

Mr. Leckie challenged cattle, hog and sheep producers to meet with representatives of the meat industry and government officials to discuss the future overall objectives for animal agriculture in Canada and how to achieve them. V

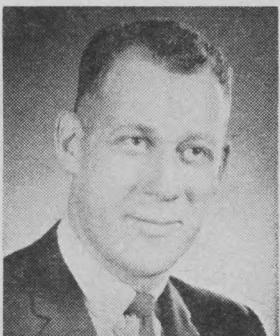
#### WHEAT BOARD NAMES NEW SALES STAFF



F. T. Rowan



J. Livingston



C. A. Gusberti

The Canadian Wheat Board has announced changes in its Sales Department personnel effective March 1. F. T. Rowan has been named Sales Manager—Wheat at Winnipeg, replacing S. W. Telfer who has resigned from the Board's service. Mr. Rowan is an easterner who joined the CWB in 1954 after a career with the Canadian Maritime Commission and as Deputy Transport Controller. J. Livingston has been appointed to

succeed Mr. Rowan as manager of the Board's Montreal office. Mr. Livingston has been continuously associated with the Board's sales operations since joining the staff in 1935.

C. A. Gusberti takes over as Assistant Sales Manager—Wheat replacing Mr. Livingston in this post. He joined the Board in 1947 and has served in the Sales Department since 1949. V

## What Farm Organizations Are Doing

### NFU ASKS GOVERNMENT FOR MAJOR POLICY SHIFTS

The National Farmers' Union, in a brief presented to Prime Minister Diefenbaker and his Cabinet last month, repeated a number of former requests and added some new ones for government consideration.

Major emphasis was placed on transportation policy. The NFU called on the Government to halt all abandonment of railway lines until a study could be completed of the effects of such abandonment on the Canadian economy and all sections of the population. The proposed study, the brief said, should evolve a transportation policy which will serve as an instrument of national policy. It should take into account not only the interests of the railways and rail-tied investment, but the whole economic and social structure of the nation.

On farm policy generally, the NFU statement had this to say: "The search for farm security and stability continues to be elusive, as the farm share of national income declines and farm people continue to be forced out of farming."

In support of this stand, the Union pointed out that farm operators as a percentage of the labor



NFU President A. P. Gleave, who presented the brief on behalf of his organization.

force declined from 14.1 in 1946 to 6.6 in 1961, while farm net income as a percentage of national income dropped from 11.3 to 3.7 in the same period. Yet, it added, "farm depopulation has not resulted in any appreciable higher average income for those remaining in agriculture."

The Government was urged to consider the following farm and general policies to meet the needs of farm people and the nation:

- Price Support Field. The Union requested that the Government embark on a comprehensive program of deficiency payments. Such payments would be the difference between

(Please turn to page 78)

### CANADA'S LARGEST SPRAYER MANUFACTURERS



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Booms adjust rapidly from vertical to horizontal position. Also provides for trailing, without interference between booms.

##### CLAMP - ON - NOZZLE

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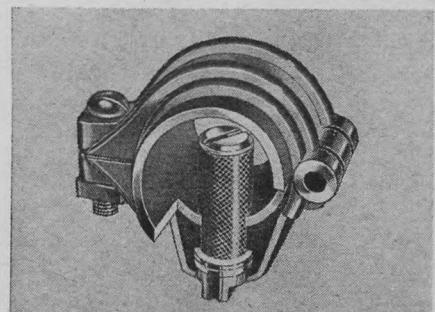
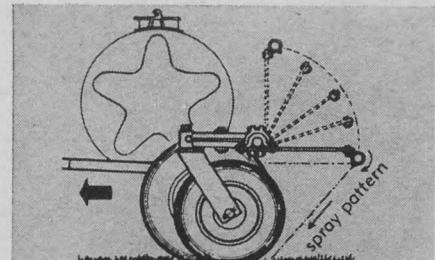
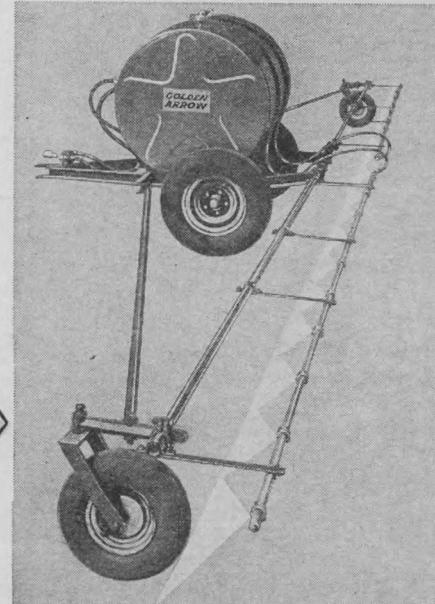
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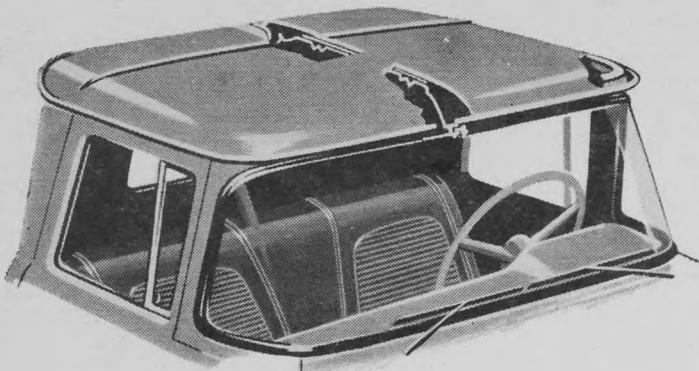
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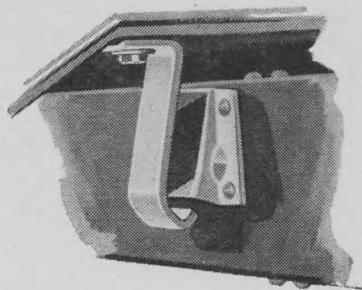
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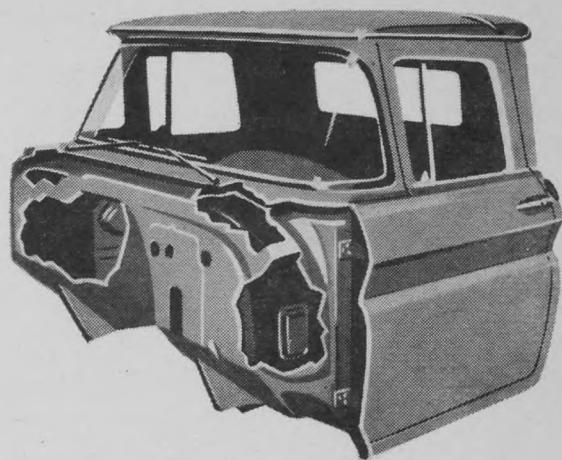


**Longer cab life with double panel roof construction.** Two walls of heavy gauge steel make the roof and upper back panels more rigid for maximum protection and better insulation.

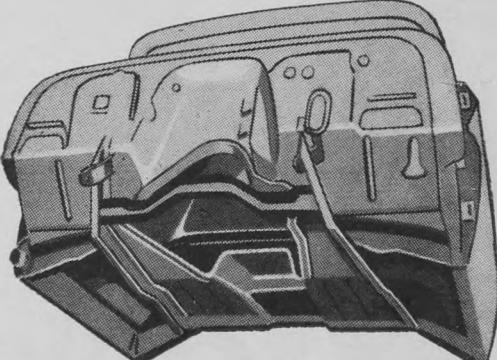
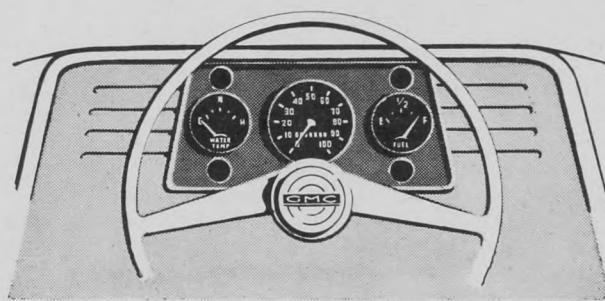
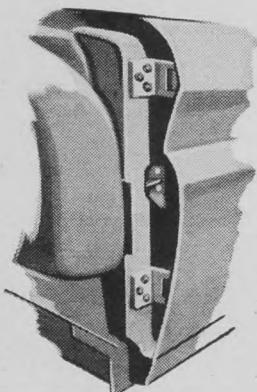


**New mounts effectively dampen vibration.** Metal fatigue is greatly reduced by these new shear-type rubber cab mounts. Less vibration and transmission noise for quiet comfort.

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**Double wall cowl adds exceptional strength to cab.** Here's where you get double-duty. This construction gives greater strength—also serves as air chamber for heating system.



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**Instruments are easy to read.** The GMC instrument cluster is designed for read-at-a-glance use. Set in a hooded reflection-free no-glare panel for greater visibility and safety.

**Solid floors have extra strength built-in.** GMC cabs are built on a rugged structure of heavy, box-section sills and cross-members. You'll get longer and better service in a GMC cab.

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IN EVERY GMC**

**GMC**

**FROM  $\frac{1}{2}$  to 60 TONS  
BUILT FOR  
EVERY TOUGH JOB!**

## What Farm Organizations Are Doing

(Continued from page 76)

tween actual market prices for farm products and their corresponding parity prices. They should be paid directly to farmers on specified portion of their production, and on a regional and quarterly basis.

• **Dairying.** The NFU asked the Government to continue the present support price of 64 cents per pound

butterfat, and proposed the difference between this support and the market price be paid directly to producers.

The Union recommended that a study be made to devise a system of pooling all milk and paying for it on the basis of grade. It said the present system of paying for milk according to the end product for which it is used is obsolete.

The Union brief called for the establishment of a national, producer-controlled marketing board for milk and milk products. This recommendation was based on the conviction that dairy problems are of a national nature today, and can no longer be dealt with by producers and provincial governments.

The Union suggested the Federal and provincial governments provide assistance for the Dairy Farmers of Canada sales promotion program by matching, dollar for dollar, the funds raised for this purpose by farmers.

It requested the Government to launch these market expansion policies for milk and milk products: milk distribution programs for school children, old age pensioners and

families on social assistance; and, the increased use of milk products in foreign aid programs.

• **Farm Co-operatives.** The NFU sought legislation to enable co-operative associations to operate under a Federal charter. It also indicated strong objection to any change in the Income Tax Act which would lead to discrimination against co-operatives.

• **National Marketing Board Legislation.** The brief asked the Government to enact enabling legislation to provide the opportunity for the establishment of producer-controlled national marketing boards with mandatory powers and controls over the marketing of farm commodities.

• **Grain Marketing.** The NFU indicated that if acreage payments are to be made in lieu of a two-price system for wheat, they should be made annually. The Union also asked that the initial prices for oats and barley be increased to the producer at time of delivery.

• **Trade.** The Union wants steps taken to ensure that Canada has access to the markets of Britain and the European Economic Community, and asked the Government to relax trade restrictions wherever possible.

• **Insurance.** It asked the Government to implement a reinsurance plan to assist provinces which institute crop insurance programs for farmers, and recommended the implementation of a program of unemployment insurance for farm labor.

• **Broadcasting.** The NFU said it was "dismayed by the pressures put on the CBC by the Board of Broad-

cast Governors in the interests of commercialism." It urged that full autonomy be returned to the CBC, so that it will be free and unhampered in its operations. ✓

### INTERNATIONAL AGREEMENTS DISCUSSED BY BRITISH NFU AND CFA LEADERS

Joint discussions were held in Ottawa last month between officers of the British National Farmers' Union and the Canadian Federation of Agriculture over ways and means of forwarding the development of further international commodity agreements for farm products.

The British farm organization was represented by its president, Harold Woolley, CBE, and its chief economist, Asher Winegarten. These gentlemen met with the Federation Executive headed by President H. H. Hannam.

The CFA made it clear that it had consistently advocated substituting consultation and agreement for unrelied world competition and conflicting national policies of importing and exporting countries.

The meeting agreed that all feed grains and dairy products are priority commodities for international action. It also agreed that the farm organizations of the world immediately explore the need for international agreements and the possible forms such agreements might take. Efforts would be made by both organizations to develop proposals for consideration at the International Federation of Agricultural Producers general meeting to be held in Dublin in May of this year. ✓

*On Saturday morning, Ted Corbett's wife and two volunteers took the Brownies into town for a game of bowling. It was followed by a visit to a lunch counter for a hamburger and a bottle of pop. One little girl wasn't satisfied with this. She also ordered a milk shake and a chocolate bar.*

*When another Brownie told her she was being too greedy, she snapped, "I've got to get my \$1.90 back somehow!"*

*There was no thought of the fun she'd had, or the skills she'd learned as a Brownie member. No sir, her folks had paid \$1.90 and she wanted to see some MATERIAL thing in return! The time and effort spent on her didn't rate one cent. Worse still, her sense of values had remained unshaken throughout a course of training which emphasizes honesty, loyalty and fair play. Seeds of "wrong thinking" had been sown when she was very very young.*

*For she didn't develop this attitude all on her own. She must've heard her parents complain about having to pay that \$1.90. I happen to know her folks think nothing of taking a trip south for the winter, or paying out \$5 or \$6 for a bottle of Scotch. But these are things they too can see as tangible rewards, so there's no kick about having to pay for them.*

*This is the power we wield for good or bad by what we say in our homes when the young ones are listening in.*

*Sincerely,  
PETE WILLIAMS.*

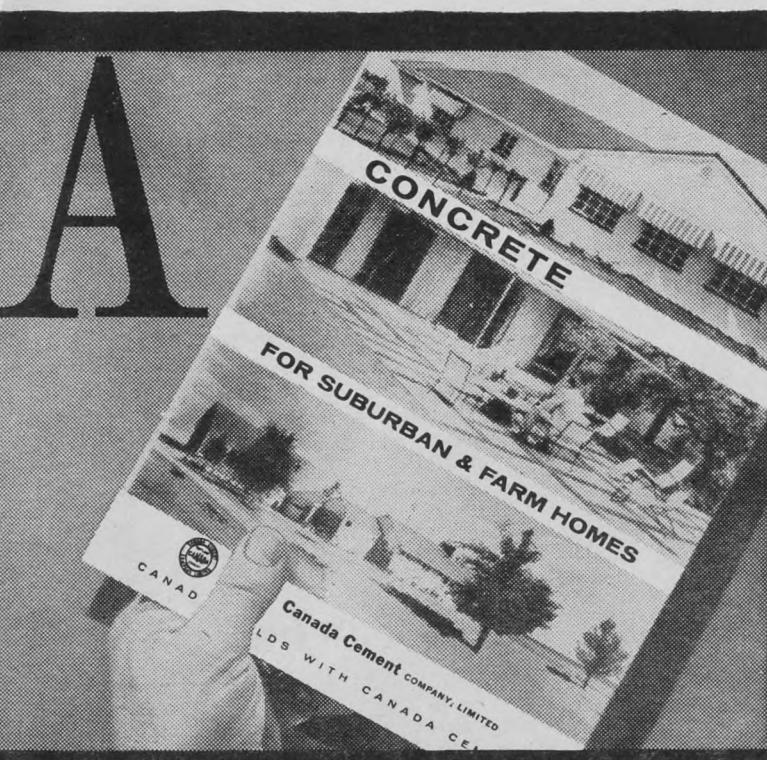
THE COUNTRY GUIDE



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HI FOLKS:

I wonder if we realize how easily children can develop a wrong sense of values from casual remarks they hear at home. If all they hear is money talk, you can't blame them if they grow up with the idea that money is the most important thing in the world.

When I was a youngster, anybody who expected too much from anything was squelched with the remark, "What do you expect for a nickel?" Nowadays, it would have to be "What do you expect for a dollar?" just to keep the relative values straight. But there are still people around who think the world, or the community, owes them a lot, just because they happen to live in it.

Like most districts, we have Scouts, Guides and Brownies here and this requires a good deal of volunteered time and work. Generally, it's the same volunteers who turn up for duty year after year.

Take our Brownie pack for instance. Every season a fee of \$1.90 is charged to cover registration and insurance costs on each child. For this great sum every Brownie gets about two hours fun and training a week, plus a few extra treats if the "treasury" is flush. I'd say it's the biggest \$1.90 value in existence.

# Letters

## Tobacco Habit

When our government starts thinking about assisting the tobacco growers in any way, it is time somebody draws their attention to the fact that tobacco is not a food or a product necessary for human beings, and we have it from doctors that it is a cause of lung cancer, our most dreaded disease. Also, the powers that be know that the use of it by young people, high school students, and particularly girls, is a detriment to their progress in learning. Once they acquire the habit they cannot sit long enough in classes to learn anything.

As I said above, tobacco is not a food and is not needed for good health as I can verify by our four nearest neighbors in the country, as only one of them uses the stuff and along with myself and wife seven of us old age pensioners, we are not religious fanatics in any way as we attend four different churches.

Another thing, I do not think our government has any right to use any public money or time of any civil servant to assist an industry of this kind. If they want to grow this crop, which is good only to kill parasites inside and outside animals and poultry, let them find their own market. It is no concern of the general public as I can prove by many people in our own small section of the country who do not use the weed.

Just another note on the habit of using tobacco. I have seen parents take the children's allowance money to buy cigarettes and the children eating margarine and doing without milk, a product the government and farm organizations are trying to promote more sale of.

M.P.M.,  
Rainy River, Ont.

## N.S. Dutch

I have just read your excellent article "Nova Scotia Dutch" in the January issue of The Country Guide. You have done an excellent job of portraying the background of the Dutch movement into Nova Scotia, and I would like to offer my gratitude and congratulations.

W. A. Jenkins,  
Director of Immigration and  
Land Settlement Services, N.S.



A delicious combination of fruit, nut and spices makes this cake equally a favourite for dinner desserts or tea-time treats. And it's so easy with *Magic Baking Powder!*



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STANDARD BRANDS LIMITED.

- 1 c. seedless raisins
- 2 c. boiling water
- 2 c. once-sifted pastry flour
- or 1½ c. once-sifted all-purpose flour
- 2½ tsps. Magic Baking Powder
- ¼ tsp. baking soda
- ¼ tsp. salt
- 1 tsp. ground cinnamon
- ¼ tsp. ground allspice
- ½ c. butter or Blue Bonnet Margarine
- 1 c. lightly-packed brown sugar
- 2 eggs
- 1 tsp. vanilla
- ½ c. chopped pecans

## Raisin-Pecan Cake

Simmer raisins in boiling water, covered, 15 mins. Drain well, saving ½ c. of the liquid. Cool. Sift together the flour, Magic Baking Powder, baking soda, salt, cinnamon and allspice. Cream butter or margarine; blend in brown sugar. Beat in eggs. Combine ½ c. raisin liquid and vanilla. Add dry ingredients to creamed mixture alternately with raisin liquid, combining lightly after each addition. Fold in raisins and chopped pecans. Turn into a greased 8-inch square cake pan, lined in bottom with greased waxed paper. Bake in moderate oven, 350°, 45 to 50 mins. Let cake stand in its pan on cake rack for 10 mins. Turn out onto rack; peel off paper; allow cake to cool completely. Frost cold cake with Cinnamon Butter Icing; decorate with pecan halves. Cut this tender cake with a saw-tooth knife.

**Cinnamon Butter Icing** Cream ¼ c. butter or Blue Bonnet Margarine; mix in ½ tsp. ground cinnamon and few grains salt. Gradually blend in 2 c. sifted icing sugar alternately with sufficient hot cream to make an icing of spreading consistency — about 2 tbsp. Mix in ½ tsp. vanilla.

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